

* rings are isolated

Structure attributes must be viewed using STN Express query preparation.

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 FULL SEARCH INITIATED 12:36:53 FILE 'REGISTRY'
 FULL SCREEN SEARCH COMPLETED - 7399 TO ITERATE

100.0% PROCESSED 7399 ITERATIONS
 SEARCH TIME: 00.00.01

578 ANSWERS

L2 578 SEA SSS FUL L1

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 FULL ESTIMATED COST ENTRY SESSION
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09/759, 360

05/20/2006

=> s 12
L3

81 L2

=> d ibib abs hitstr 1-81

L3 ANSWER 1 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2005:1216425 CAPLUS
 DOCUMENT NUMBER: 143:477970

TITLE: Preparation of benzene derivatives containing amide moiety as ACC inhibitor
 INVENTOR(S): Suzuki, Nobuyasu; Nihei, Yukio; Ichinose, Hidehiro; Tanaka, Hideyuki; Yasa, Noriko; Hatanaka, Toshihiro; Maizawa, Youko; Nakanishi, Eiji; Kondo, Nobuo
 PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan
 SOURCE: PCT Int. Appl., 227 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 20051117	A1	2005-07-392	20050418	
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:		JP 2004-122199	A 20040416	
		JP 2004-122200	A 20040416	
		JP 2004-122201	A 20040416	
		JP 2005-21616	A 20050128	

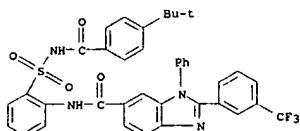
OTHER SOURCE(S): MARPAT 143:477970
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

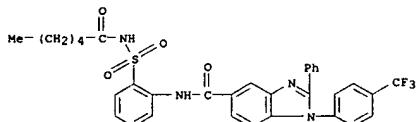
AB Title compds. I [X = Q1, etc.]: ring A = (un)substituted aromatic hydrocarbon, (un)substituted aromatic heterocycle, (un)substituted cyclic alkenyl, etc.; B = single bond, -CO-, -NHCO-, etc.; R7 = (un)substituted alkyl, (un)substituted alkenyl, (un)substituted alkynyl, etc.; n = 0-5; V = Q2, etc.; R1-R3 = (un)substituted alkyl, (un)substituted alkenyl, (un)substituted alkynyl, etc.; R4-R6, R8 = (un)substituted alkyl, (un)substituted alkenyl, (un)substituted alkynyl, etc.) were prepared

For

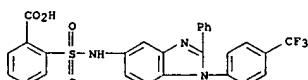
L3 ANSWER 1 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 CN 1H-Benzimidazole-6-carboxamide, N-[2-[(4-(1,1-dimethylethyl)benzoyl)amino]sulfonyl]phenyl]-1-phenyl-2-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



RN 869574-47-0 CAPLUS
 CN 1H-Benzimidazole-6-carboxamide, N-[2-[(1-oxohexyl)amino]sulfonyl]phenyl]-2-phenyl-1-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



RN 869574-48-1 CAPLUS
 CN Benzonic acid, 2-[(2-phenyl-1-[4-(trifluoromethyl)phenyl]-1H-benzimidazol-5-yl)amino]sulfonyl- (9CI) (CA INDEX NAME)



IT 869577-97-0P, 2-Phenyl-1-[4-(trifluoromethyl)phenyl]benzimidazole-5-carboxylic acid 869577-98-0P, 2-Phenyl-1-[4-(trifluoromethyl)phenyl]benzimidazole-5-amine
 RL: RCT (Reactant); SPP (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of benzene derivs. containing amide moiety as ACC

inhibitors for treatment of hyperlipidemia, diabetes, etc.)

RN 869577-97-9 CAPLUS
 CN 1H-Benzimidazole-5-carboxylic acid, 2-phenyl-1-[4-(trifluoromethyl)phenyl]-

L3 ANSWER 1 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 example, amidation of compd. II [R = OH], e.g., prepd. from 4-nitrobenzoic acid in 4 steps, with anthranilic acid Et ester followed by hydrolysis using NaOH afforded compd. II [R = 2-carboxyphenylamino]. In ACC (acetyl CoA carboxylase) inhibition assays, compd. II [R = 2-carboxyphenylamino] exhibited the activity of 53%. Compds. I are claimed useful for the treatment of hyperlipidemia, diabetes, etc.

IT 869574-43-6P 869574-45-8P 869574-46-9P

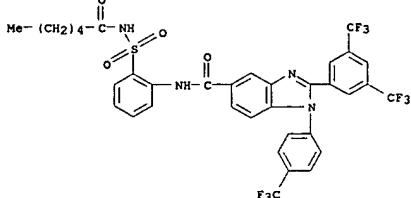
RL: PRC (Pharmacological activity); SPP (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzene derivs. containing amide moiety as ACC

inhibitors for treatment of hyperlipidemia, diabetes, etc.)

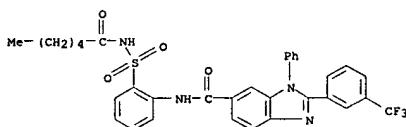
RN 869574-43-6 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[3,5-bis(trifluoromethyl)phenyl]-N-(2-[(1-oxohexyl)amino]sulfonyl)phenyl]-1-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



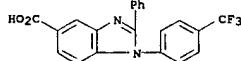
RN 869574-45-8 CAPLUS

CN 1H-Benzimidazole-6-carboxamide, N-[2-[(1-oxohexyl)amino]sulfonyl]phenyl]-1-phenyl-2-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

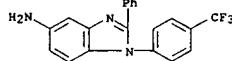


RN 869574-46-9 CAPLUS

L3 ANSWER 1 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 (9CI) (CA INDEX NAME)



RN 869577-98-0 CAPLUS
 CN 1H-Benzimidazole-5-amine, 2-phenyl-1-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: THIS

67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

X

L3 ANSWER 2 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005-1138745 CAPLUS

DOCUMENT NUMBER: 144-52000

TITLE: Synthesis and photoconductive properties of soluble polyimides bearing heterocyclic substituents on polymer main and side chains

AUTHOR(S): Nosova, G. I.; Aleksandrova, E. L.; Solovskaya, N.

A.: Romashkova, K. A.; Gofman, I. V.; Luk'yashina, V. A.; Zhukova, E. V.; Kudryavtsev, V. V.

CORPORATE SOURCE: Inst. Macromol. Compounds, Russian Acad. Sci., St. Petersburg, 199004, Russia

SOURCE: Vysokomolekulyarnye Soedineniya, Seriya A i Seriya B

(2005), 47(9), 1584-1594

CODEN: VSSBEE; ISSN: 1023-3091

PUBLISHER: Izdatel'stvo Nauka

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Photosensitive soluble polyimides that contain benzimidazole, benzoxazole, and oxadiazole moieties in the diamine component of their repeat units were synthesized. Photocond. processes in thin layers of polyimides were studied and the enhancement of the electron-donating properties of the benzimidazole moiety by substituting the hydrogen atom in the cycle for the Me and, especially, Ph group was shown to

facilitate an increase in the intrinsic photosensitivity by a factor of 5 to 8 in the spectral region up to 500 nm. Sensitization by 2,4,5,7-tetranitro-9-fluorenone and various dyes led to a tenfold increase in photosensitivity over the entire visible spectral range as compared with the neat polymer. When benzoxazole, benzothiazole, or oxadiazole cycles were introduced

into polyimides, their intrinsic photosensitivity in the spectral range of 400-700 nm increased, depending on the chemical structure of the diamine component of the repeat unit and the polymer synthesis procedure.

IT 569674-44-09 569674-48-2P 569674-49-3P

569674-50-6P 871269-59-9P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (photoconductive soluble polyimides bearing heterocyclic substituents)

RN 569674-44-8 CAPLUS

CN 1,3-isobenzofurandione, 5,5'-oxybis-, polymer with 2-(4-aminophenyl)-1-phenyl-1H-benzimidazol-5-amine (9CI) (CA INDEX NAME)

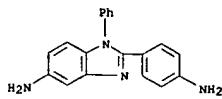
CM 1

CRN 57842-33-8

CMF C19 H16 N4

L3 ANSWER 2 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

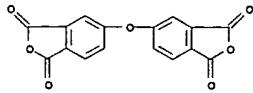
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CM 2

CRN 1823-59-2

CMF C16 H6 O7



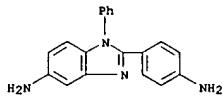
RN 569674-48-2 CAPLUS

CN 1,3-isobenzofurandione, 5,5'-carbonylbis-, polymer with 2-(4-aminophenyl)-1-phenyl-1H-benzimidazol-5-amine (9CI) (CA INDEX NAME)

CM 1

CRN 57842-33-8

CMF C19 H16 N4



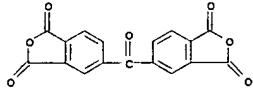
CM 2

CRN 2421-28-5

CMF C17 H6 O7

L3 ANSWER 2 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)



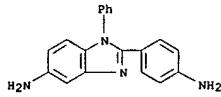
RN 569674-49-3 CAPLUS

CN 1,3-isobenzofurandione, 5,5'-sulfonylbis-, polymer with 2-(4-aminophenyl)-1-phenyl-1H-benzimidazol-5-amine (9CI) (CA INDEX NAME)

CM 1

CRN 57842-33-8

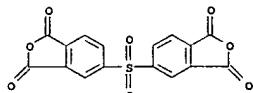
CMF C19 H16 N4



CM 2

CRN 2540-99-0

CMF C16 H6 O8 S



RN 569674-50-6 CAPLUS

CN 1,3-isobenzofurandione, 5,5'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, polymer with 2-(4-aminophenyl)-1-phenyl-1H-benzimidazol-5-amine (9CI) (CA INDEX NAME)

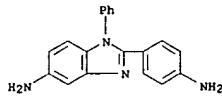
CM 1

CRN 57842-33-8

CMF C19 H16 N4

L3 ANSWER 2 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

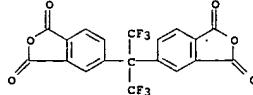
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CM 2

CRN 1107-00-2

CMF C19 H6 F6 O6



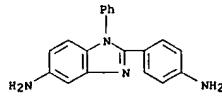
RN 871269-59-9 CAPLUS

CN 1,3-isobenzofurandione, 5,5'-[1,3-phenylenebis(oxy)]bis-, polymer with 2-(4-aminophenyl)-1-phenyl-1H-benzimidazol-5-amine (9CI) (CA INDEX NAME)

CM 1

CRN 57842-33-8

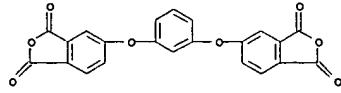
CMF C19 H16 N4



CM 2

CRN 18959-92-7

CMF C22 H10 O8



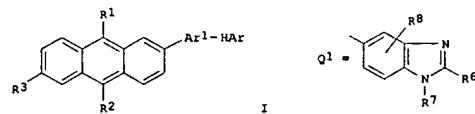
L3 ANSWER 2 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)

L3 ANSWER 3 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2005:1126669 CAPLUS
 DOCUMENT NUMBER: 143:405909
 TITLE: Preparation of benzimidazole derivatives for use in organic electroluminescent elements
 INVENTOR(S): Kawamura, Masahiro; Yamamoto, Hiroshi; Hosokawa, Chishio
 PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 95 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005097756	A1	20051020	WO 2005-JP6605	20050404
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, T2, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, MU, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			JP 2004-112799	A 20040407

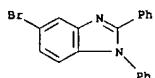
OTHER SOURCE(S): MARPAT 143:405909
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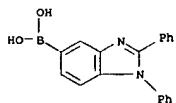
AB The title compds., e.g. I [R1 = R3 = substituent; Ar1 = single bond, divalent connecting group; Har = Q1, etc.; R6 - R8 = substituent] are prepared. Thus, 1,2-diphenyl-5-(4-(9,10-diphenylanthracen-2-yl)phenyl)-1H-benzimidazole was prepared in a multistep process from 2-aminoanthraquinone. The high luminescent efficiency of organic electroluminescent elements containing compds. of this invention was demonstrated.

L3 ANSWER 3 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 IT 760212-55-3P 867044-32-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of benzimidazole derivs. for use in organic electroluminescent elements)

RN 760212-55-3 CAPLUS
 CN 1H-Benzimidazole, 5-bromo-1,2-diphenyl- (9CI) (CA INDEX NAME)



RN 867044-32-4 CAPLUS
 CN Boronic acid, (1,2-diphenyl-1H-benzimidazol-5-yl)- (9CI) (CA INDEX NAME)

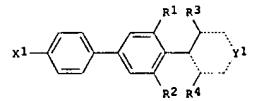


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2005:281222 CAPLUS
 DOCUMENT NUMBER: 142:363435
 TITLE: Organic electroluminescent devices containing specific biphenyl compounds and LCD therewith
 INVENTOR(S): Fukuda, Mitsuhiro; Kita, Hiroshi
 PATENT ASSIGNEE(S): Konica Minolta Holdings, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 50 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005085658	A2	20050331	JP 2003-317930	20030910
PRIORITY APPLN. INFO.:			JP 2003-317930	20030910

OTHER SOURCE(S): MARPAT 142:363435
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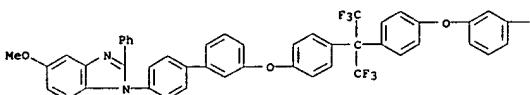
AB The devices contain, in one or more of organic compound layers, compds. I (X1 or Q2 [Z1, Z2 = C or C(R7); (R7 = H, substituent); R5, R6 = H, substituent; Ar1, Ar2 = aromatic group]; Y1 = 6-membered aromatic ring substituted with X1; R1-R4 = H, substituent (R1 = R2 = R3 = R4 = H), X2-p-C6H4-m-C6H4L2X'2 (X2, X'2 = the same as X1; L2 = heterocycle, O-containing bivalent linking group), and/or X3-p-C6H4-C6H4L3CR8R9L'3X'3 (X3, X'3 = the same as X1; L3 = single bond, O, alkylen; R8, R9 = substituent including (fluoro)hydroazetyl as the one or both; L'3 = single bond or bivalent linking group). The compds. may work as hole-transporting host of phosphorescent substances in the layers.

IT 848836-86-2
 RL: DEV (Device component use); USES (Uses)
 (emitting layers; long-life organic LED containing sp. biphenyl compds. and showing high luminescent efficiency for LCD)
 RN 848836-86-2 CAPLUS
 CN 1-Naphthalenamine, N-phenyl-N-[3'-(4-[2,2,2-trifluoro-1-(4-[(5-methoxy-2-phenyl-1H-benzimidazol-1-yl)[1,1'-biphenyl]-3-yl)oxy]phenyl)-1-(trifluoromethyl)ethyl]phenoxy][1,1'-biphenyl]-4-yl]- (9CI) (CA INDEX NAME)

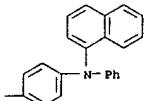
L3 ANSWER 4 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)

PAGE 1-A



PAGE 1-B



L3 ANSWER 5 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:140278 CAPLUS

DOCUMENT NUMBER: 142:229127

TITLE: Organic electroluminescent elements with low emission voltage and power consumption and lighting apparatus and displays using them

INVENTOR(S): Kato, Eisaku; Oshiyama, Tomohiro; Suzurizato, Yoshiyuki; Kita, Hiroshi

PATENT ASSIGNEE(S): Konica Minolta Holdings, Inc., Japan

SOURCE: Jpn. Kokai Tokyo Koho, '38 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005044790	A2	20050217	JP 2004-195396	20040701
			JP 2003-193321	A 20030708

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 142:229127

AB The elements, useful for blue- or white-emitting backlights for LCD, have layers containing compds. L1Xn (L1 = polyvalent hydrocarbon or aromatic

linking group; X = (un)substituted N-containing aromatic heterocyclic group linked to L1 at N; n ≥ 2) adjacent to light-emitting layers between anodes and cathodes. The layers show good hole-barrier properties.

IT 644510-75-4

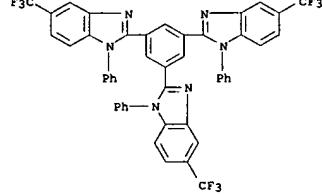
RL: DEV (Device component use); USES (Uses) (hole-barrier layer; organic EL elements containing N-containing heterocyclic

compds. in hole-barrier layers for displays with low emission voltage and power consumption)

RN 644510-75-4 CAPLUS

CN 1H-Benzimidazole, 2,2',2''-(1,3,5-benzenetriyl)tris(1-phenyl-5-

(trifluoromethyl)- (9CI) (CA INDEX NAME)



L3 ANSWER 5 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)

L3 ANSWER 6 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:59099 CAPLUS

DOCUMENT NUMBER: 142:261467

TITLE: A versatile method for the synthesis of benzimidazoles

from o-nitroanilines and aldehydes in one step via a reductive cyclization

AUTHOR(S): Yang, Donghai; Fokas, Demosthenes; Li, Jingzhou; Yu, Libing; Baldino, Carmen M.

CORPORATE SOURCE: Department of Chemistry, ArQuile Inc, Woburn, MA, 01801, USA

SOURCE: Synthesis (2005), (1), 47-56

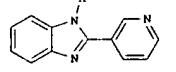
PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:261467

GI



AB A highly efficient and versatile method for the synthesis of benzimidazoles, e.g., I, was achieved in one step by the Na2S2O4 reduction of

o-nitroanilines in the presence of aldehydes. Heating a solution of o-nitroaniline and an aldehyde, in the presence of aqueous or solid

Na2S2O4, provided facile access to a series of 2-substituted N-H benzimidazoles containing a wide range of functional groups not always compatible with the

existing synthetic methods. This method has also been applied to the regioselective synthesis of N-alkyl and N-aryl benzimidazoles by the cyclization of the corresponding N-substituted nitroanilines, resp. In addition, the method was applied successfully to the synthesis of other imidazole containing heterocyclic ring systems such as 1H-imidazo[4,5-b]pyridines and 1H-imidazo[4,5-f]quinoline.

IT 645960-10-3# 645960-11-4#

RL: SPC (Synthetic preparation); PREP (Preparation) (regioselective preparation of benzimidazoles via amination of fluoronitrobenzenes with amines followed by reductive cyclization with aldehydes)

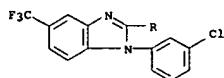
RN 645960-10-3 CAPLUS

CN 1H-Benzimidazole, 1-(3-chlorophenyl)-2-(3-methylphenyl)-5-

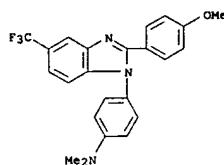
(trifluoromethyl)- (9CI) (CA INDEX NAME)

L3 ANSWER 6 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)



RN 845960-11-4 CAPLUS
 CN Benzenamine, 4-[2-(4-methoxyphenyl)-5-(trifluoromethyl)-1H-benzimidazol-1-yl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:1079756 CAPLUS
 DOCUMENT NUMBER: 142:45518
 TITLE: Organic electroluminescent material, organic electroluminescent device, and heterocycle-containing iridium complex compound
 INVENTOR(S): Takada, Ichinori; Ishibashi, Tadashi; Yamada, Jiro; Tamura, Shinichiro
 PATENT ASSIGNEE(S): Sony Corporation, Japan
 SOURCE: Eur. Pat. Appl., 21 pp.
 CODEN: EPXXDW

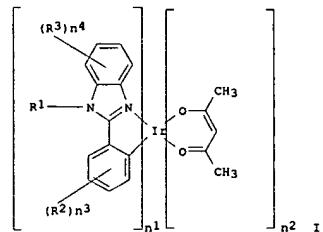
DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1486552	A1	20041215	EP 2004-13470	20040609
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK,				
HR	JP 2005002053	A2	20050106	JP 2003-167828
US 2005008895	A1	20050113	US 2004-864112	20040609
CN 1618926	A	20050525	CN 2004-10083270	20040614
PRIORITY APPLN. INFO.:			JP 2003-167828	A 20030612

OTHER SOURCE(S): MARPAT 142:45518

GI



AB Heterocycle-containing iridium complex compds. are described by the general formula I (R1 = lower alkyl or (un)substituted Ph group; R2 and R3 = independently selected alkyl, alkyloxy, and cyano groups; either n1 =

L3 ANSWER 7 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 and n2 = 1 or n1 = 3 and n2 = 0; and n3 = 0-4; and n4 = 0-4). Org. electroluminescent materials comprising the compds. and

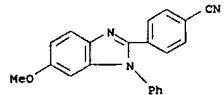
electroluminescent devices employing them are also described.

IT 007610-03-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (heterocycle-containing iridium complexes and electroluminescent materials comprising them and electroluminescent device devices using the materials)

RN 807610-03-3 CAPLUS

CN Benzonitrile, 4-(6-methoxy-1-phenyl-1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:780674 CAPLUS

DOCUMENT NUMBER: 141:303998

Preparation of nitrogen-containing heterocycle derivative and organic electroluminescent element using the same

INVENTOR(S): Yamamoto, Hiroshi; Matsuura, Masahide; Kubota, Mineyuki; Kawamura, Masahiro

PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan

SOURCE: PCT Int. Appl., 61 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

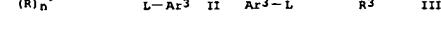
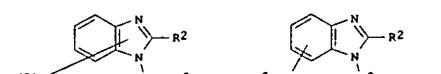
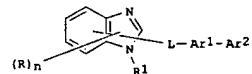
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004080975	A1	20040923	WO 2004-JP682	20040127
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HK, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1602648	A1	20051207	EP 2004-705503	20040127
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.:			JP 2003-67847	A 20030313

WO 2004-JP682 W 20040127

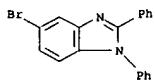
OTHER SOURCE(S): MARPAT 141:303998

GI



AB Novel benzimidazole derivs. [I, II, or III; R, R2, R3 = H, (un)substituted

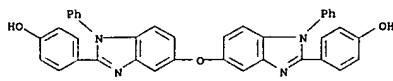
L3 ANSWER 8 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 C6-60 aryl, pyridyl, quinolyl, Cl-20 alkyl, or Cl-20 alkoxy; n = 0-4; R1 = (un)substituted C6-60 aryl, pyridyl, quinolyl, Cl-20 alkyl, or Cl-20 alkoxy; L = (un)substituted C6-60 arylene, pyridinylene, quinolinylene, or fluorenylene; Ar1 = (un)substituted C6-60 arylene, pyridinylene, or quinolinylene; Ar2 = groups listed in R1; Ar3 = groups listed in R1, -Ar1-Ar2, wherein Ar1 and Ar2 are defined above, are prep'd. Also disclosed are a material for an org. electroluminescent (EL) element comprising the nitrogen-contg. heterocycle deriv. and an org. EL element having one pair of electrodes and, sandwiched between them, at least one org. compd. layer including a luminous layer, characterized in that the at least one org. compd. layer comprises the above nitrogen-contg. heterocycle deriv. The novel nitrogen-contg. heterocycle derivs. are useful as a component of an org. EL element which is capable of exhibiting high luminous brightness and high luminous efficiency with a low electron voltage. Thus, 5-bromo-1,2-diphenyl-1H-benzimidazole was coupled with [10-(naphthalen-2-yl)anthracen-9-yl]boronic acid in the presence of tetrakis(triphenylphosphine)palladium in a mixt. of 1,2-dimethoxyethane and 2.0 M ad. Na2CO3 soln. under refluxing for 8 h to give 49% 1,2-diphenyl-5-[10-(naphthalen-2-yl)anthracen-9-yl]-1H-benzimidazole
 (II). An electroluminescent device with an electron-injection layer contg. II showed blue luminescence with luminance of 1,150 nit and luminous efficiency of 7.28 cd/A at 5.75 V.
 IT 760212-55-3P 5-Bromo-1,2-diphenyl-1H-benzimidazole
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of nitrogen-containing heterocycle derivative and organic electroluminescent elements using them)
 RN 760212-55-3 CAPLUS
 CN 1H-Benzimidazole, 5-bromo-1,2-diphenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

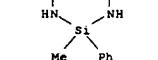
IT 849738-74-5P 849738-75-6P 849738-76-7P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (synthesis and characterization of oxybis(benzimidazole)-containing polysilazane-polysiloxanes based on a new bisphenol)
 RN 849738-74-5 CAPLUS
 CN Phenol, 4,4'-(oxybis[1-phenyl-1H-benzimidazole-5,2-diyl])bis-, polymer with 2,4,6-trimethyl-2,4,6-triphenylcyclotrisilazane (9CI) (CA INDEX NAME)
 CM 1
 CRN 849738-73-4
 CMF C38 H26 N4 O3



CM 2

CRN 4222-38-2
 CMF C21 H27 N3 Si3

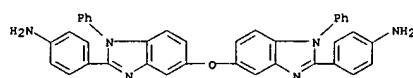
IT 849738-74-5P 849738-75-6P 849738-76-7P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (synthesis and characterization of oxybis(benzimidazole)-containing polysilazane-polysiloxanes based on a new bisphenol)
 RN 849738-75-6 CAPLUS
 CN Phenol, 4,4'-(oxybis[1-phenyl-1H-benzimidazole-5,2-diyl])bis-, polymer with 2,2,4,4,6,6-hexamethylcyclotrisilazane (9CI) (CA INDEX NAME)
 CM 1
 CRN 849738-73-4
 CMF C38 H26 N4 O3



IT 849738-74-5P 849738-75-6P 849738-76-7P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (synthesis and characterization of oxybis(benzimidazole)-containing polysilazane-polysiloxanes based on a new bisphenol)
 RN 849738-75-6 CAPLUS
 CN Phenol, 4,4'-(oxybis[1-phenyl-1H-benzimidazole-5,2-diyl])bis-, polymer with 2,2,4,4,6,6-hexamethylcyclotrisilazane (9CI) (CA INDEX NAME)
 CM 1
 CRN 849738-73-4
 CMF C38 H26 N4 O3

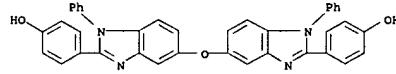
IT 849738-74-5P 849738-75-6P 849738-76-7P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (synthesis and characterization of oxybis(benzimidazole)-containing polysilazane-polysiloxanes based on a new bisphenol)
 RN 849738-75-6 CAPLUS
 CN Phenol, 4,4'-(oxybis[1-phenyl-1H-benzimidazole-5,2-diyl])bis-, polymer with 2,2,4,4,6,6-hexamethylcyclotrisilazane (9CI) (CA INDEX NAME)
 CM 1
 CRN 849738-73-4
 CMF C38 H26 N4 O3

L3 ANSWER 9 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 ACCESSION NUMBER: 2004:702557 CAPLUS
 DOCUMENT NUMBER: 142:392744
 TITLE: Synthesis and properties of polyorganosilazasiloxo-heteroarylenes containing diphenyl oxide and benzimidazole fragments
 AUTHOR(S): Kevherashvili, M.; Asatiani, L.; Butskhrikidze, B.; Khurttsilava, I.; Museliani, T.
 CORPORATE SOURCE: Georgia
 SOURCE: Sakartvelos Meenirebata Akademias Macne, Kimis
 Seria (2004), 30(1-2), 67-72
 PUBLISHER: Proizvodstvenno-Izdatel'skoe Ob'edinenie "Metanierba"
 DOCUMENT TYPE: Journal
 LANGUAGE: Georgian
 AB: By using condensation polymerization, new silazane organosilicon polymers were synthesized from cyclotrisilazane and bis(benzimidazole) oxide-based bisphenol. The mechanism of the reaction has been formulated based on kinetic data. The thermo-oxidative stability of the new polymers has been studied.
 IT 849738-72-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (monomer; synthesis and characterization of oxybis(benzimidazole)-containing polysilazane-polysiloxanes based on a new bisphenol)
 a new bisphenol)
 RN 849738-72-3 CAPLUS
 CN Phenol, 4,4'-(oxybis[1-phenyl-1H-benzimidazole-5,2-diyl])bis- (9CI) (CA INDEX NAME)



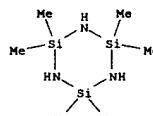
IT 849738-73-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (monomer; synthesis and characterization of oxybis(benzimidazole)-containing polysilazane-polysiloxanes based on a new bisphenol)
 RN 849738-73-4 CAPLUS
 CN Phenol, 4,4'-(oxybis[1-phenyl-1H-benzimidazole-5,2-diyl])bis- (9CI) (CA INDEX NAME)

L3 ANSWER 9 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



CM 2

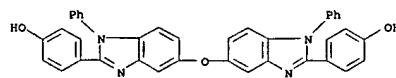
CRN 1009-93-4
 CMF C6 H21 N3 Si3



IT 849738-76-7P 849738-77-8P 849738-78-9P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (synthesis and characterization of oxybis(benzimidazole)-containing polysilazane-polysiloxanes based on a new bisphenol)
 RN 849738-76-7 CAPLUS
 CN Phenol, 4,4'-(oxybis[1-phenyl-1H-benzimidazole-5,2-diyl])bis-, polymer with 2,4,6-triethenyl-2,4,6-trimethylcyclotrisilazane (9CI) (CA INDEX NAME)

CM 1

CRN 849738-73-4
 CMF C38 H26 N4 O3

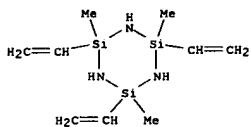


CM 2

CRN 5505-72-6
 CMF C9 H21 N3 Si3

L3 ANSWER 9 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)



L3 ANSWER 10 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003-836829 CAPLUS

DOCUMENT NUMBER: 139:323519

TITLE: Preparation of imidazoarenes as prostaglandin E2 subtype EP4 receptor antagonists for treatment of

IL-6

INVENTOR(S): Shimjo, Masato; Taniguchi, Kana

PATENT ASSIGNEE(S): Pfizer Pharmaceuticals Inc., Japan; Pfizer Inc.

SOURCE: PCT Int. Appl., 427 pp.

CODEN: PIXX02

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003086371	AZ	20031023	WO 2003-IB1310	20030403
WO 2003086371	A3	20040603		
			W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MD, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TR, AT, BE, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG	
CA 2481535	AA	20031023	CA 2003-2481535	20030403
AU 2003214525	A1	20031027	AU 2003-214525	20030403
EP 1499305	A2	20050126	EP 2003-710104	20030403
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003009200	A	20050222	BR 2003-9200	20030403
CN 1659847	A	20050824	CN 2003-813401	20030403
JP 2005533756	TZ	20051110	JP 2003-583392	20030403
US 2003236260	A1	20031225	US 2003-411491	20030410
NO 2004004462	A	20050111	NO 2004-4462	20041020
PRIORITY APPLN. INFO.:			US 2002-372364P	P 20020412
			WO 2003-IB1310	W 20030403

OTHER SOURCE(S): MARPAT 139:323519
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The present invention relates to the use of a prostaglandin E2 (PGE2) subtype EP4 receptor ligand in the manufacture of a medicament for the treatment of interleukin 6 (IL-6) involved diseases, such as alc. cirrhosis, amyloidosis, atherosclerosis, cardiac disease, sclerosis, and

L3 ANSWER 10 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

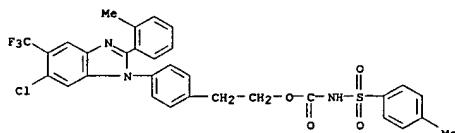
organ transplantation reactions (no data). The invention also relates to the assay which comprised culturing peripheral whole blood with a test compd. and detg. the effect of the compd. on PGE2-induced whole blood cells activation. Three hundred eighty title compds. I [wherein Y1-Y4 = N, CH, CL; R1 = H, (un)substituted alkyl, alkenyl, alkynyl, cycloalkyl, alkoxy, pyrrolidinyl, amino, etc.; A = (un)substituted 5-6 membered (un)substituted monocyclic (hetero)arom. ring; B = halo-substituted alkylene, cycloalkylene, alkenylene, alkynylene, alkyleneoxy, etc., optionally substituted with an oxo or alkyl group; W = amino, O, S, bond, etc.; R2 = H, OH, alkoxy; Z = 5-12 membered (un)substituted monocyclic or bicyclic (hetero)aryl; L = halo, alkyl, haloalkyl, OH, alkoxy, haloalkoxy, alkylthio, NO2, amino, etc.] were prep'd. Thus, cycloaddn. of

2-[4-[(3-amino-4,6-dimethyl-2-pyridinyl)amino]phenyl]ethanol (4-step prepn. given) with propionyl chloride in toluene provided 2-[4-(2-ethyl-5-dimethyl-3H-imidazo[4,5-b]pyridin-3-yl)phenyl]ethyl propionate, which was treated with aq. LiOH to give the ethanol deriv. (86%). Chlorination (90%) using thionyl chloride, conversion to the azide (85%), and Pd/C catalyzed hydrogenation afforded the amine (94%). Coupling of the amine with p-toluenesulfonyl isocyanate in CH2Cl2 gave II (56%). The latter significantly inhibited IL-6 secretion by PGE2 in ConA-stimulated human peripheral blood mononuclear cells (PBMC).

IT 415906-84-2
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIO (Biological study); PREP (Preparation); USES (Uses)
(preparation of imidazoarene prostaglandin EP4 receptor antagonists

for treatment of IL-6 involved diseases)

RN 415906-84-2 CAPLUS
CN Carbamic acid, [(4-methylphenyl)sulfonyl]-, 2-[4-[6-chloro-2-(2-methylphenyl)-5-(trifluoromethyl)-1H-benzimidazol-1-yl]phenylethyl ester (9CI) (CA INDEX NAME)

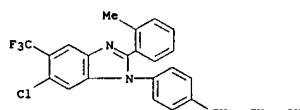


IT 415913-33-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of imidazoarene prostaglandin EP4 receptor antagonists

for treatment of IL-6 involved diseases)

RN 415913-33-6 CAPLUS
Benzeneethanol, 4-[6-chloro-2-(2-methylphenyl)-5-(trifluoromethyl)-1H-benzimidazol-1-yl]- (9CI) (CA INDEX NAME)

L3 ANSWER 10 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

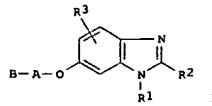


L3 ANSWER 11 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2003:656762 CAPLUS
 DOCUMENT NUMBER: 139:197483
 TITLE: Preparation of 1-phenyl-2-heteroarylbenzimidazoles
 for use in the treatment of immunological diseases
 INVENTOR(S): Blume, Thorsten; Halfbrodt, Wolfgang; Kuhnke, Joachim;
 Moenning, Ursula; Elger, Bernd; Schneider, Herbert
 PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany
 SOURCE: PCT Int. Appl., 65 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
WO 2003068766	A1	20030821	WO 2003-EP462	20030117		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	DE 10207844	A1	20030904	DE 2002-10207844	20020215
CA 2475780	AA	20030821	CA 2003-2475780	20030117		
AU 2003205624	A1	20030904	AU 2003-205624	20030117		
EP 1474415	A1	20041110	EP 2003-702464	20030117		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK	DE 2003007723	A	20050125	BR 2003-7723	20030117	
CN 1633429	A	20050629	CN 2003-803997	20030117		
JP 2005521686	T2	20050721	JP 2003-567893	20030117		
US 2003229085	A1	20031211	US 2003-366688	20030214		
US 6962932	B2	20051108				
NO 2004003841	A	20041112	NO 2004-3841	20040914		
ZA 2004007381	A	20050914	ZA 2004-7381	20040914		
US 2005267160	A1	20051201	US 2005-198098	20050804		
PRIORITY APPLN. INFO.:			DE 2002-10207844	A	20020215	
			US 2002-357834P	P	20020221	
			WO 2003-EP462	W	20030117	
			US 2003-366688	A1	20030214	

OTHER SOURCE(S): MARPAT 139:197483
 GI

L3 ANSWER 11 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



AB Title compds. I [R1 = (un)substituted Ph; R2 = (un)substituted mono- or bicyclic heterocyclic; R3 = H, OH, alkoxy; A = (un)substituted alkylene; B =

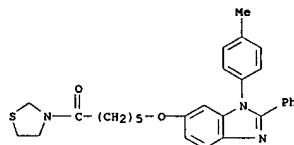
= CO2H, (un)substituted CONH2, CONHNH2] were prepared for use in the treatment and prophylaxis of diseases that are associated with microglial activation, and of T-cell mediated immunol. diseases (no data). Thus, 3,4-F(2N)C6H3OH was treated with 4-MeC6H4NH2 to give 4-MeC6H4NH2C6H3(OH)2, which was treated with Br(CH2)5CO2Me to give 4-MeC6H4NH2C6H3(OH)2(CH2)5CO2Me-2,5. This ester was cyclized with nicotinaldehyde and hydrolyzed to give I [R1 = 4-MeC6H4, R2 = 3-pyridyl, R3 = H, A = (CH2)5CO2H].

IT 582310-61-0P
 RL: SPM (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 1-phenyl-2-heteroarylbenzimidazoles for use in the treatment of immunol. diseases)

RN 58130-61-0 CAPLUS

CN Thiazolidine, 3-(6-[(1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-1-oxohexyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L3 ANSWER 12 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2003:656577 CAPLUS
 DOCUMENT NUMBER: 139:173799
 TITLE: Microglia inhibitors for interrupting immune reactions
 induced by interleukin 12 and interferon γ
 INVENTOR(S): Blume, Thorsten; Docke, Wolf-Dietrich; Halfbrodt, Wolfgang; Kuhnke, Joachim; Moenning, Ursula; Elger, Bernd; Schneider, Herbert
 PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany
 SOURCE: PCT Int. Appl., 48 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
WO 2003068225	A1	20030821	WO 2003-EP467	20030117		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	DE 10207843	A1	20030904	DE 2002-10207843	20020215
CA 2475770	AA	20030821	CA 2003-2475770	20030117		
AU 2003245523	A1	20030904	AU 2003-245523	20030117		
EP 1474138	A1	20041110	EP 2003-709380	20030117		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK	DE 2003007726	A	20050111	BR 2003-7726	20030117	
JP 2005522447	T2	20050728	JP 2003-567407	20030117		
CN 175646	A	20060405	CN 2003-803992	20030117		
US 2004011117	A1	20040108	US 2003-366703	20030214		
NO 2004003840	A	20041112	NO 2004-3840	20040914		
ZA 2004007382	A	20050914	ZA 2004-7382	20040914		
PRIORITY APPLN. INFO.:			DE 2002-10207843	A	20020215	
			US 2002-357833P	P	20020221	
			WO 2003-EP467	W	20030117	

OTHER SOURCE(S): MARPAT 139:173799
 AB The invention discloses the use of microglia inhibitors for producing medicaments that inhibit the monocyte-, macrophage-, and T-cell-induced immune reactions, as well as their use for treating T cell-induced immunol. diseases and inflammatory reactions that are not T-cell-induced. The microglia inhibitors of the invention include benzimidazole derivs.

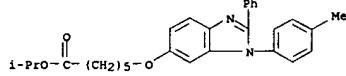
IT 350231-85-3 350231-86-6
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (microglia inhibitors for interrupting immune reactions induced by interleukin 12 and interferon γ)

RN 350231-85-5 CAPLUS

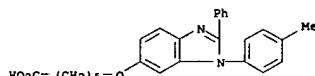
L3 ANSWER 12 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CN Hexanoic acid,

6-[(1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-1-methylethyl ester (9CI) (CA INDEX NAME)



RN 350231-86-6 CAPLUS
 CN Hexanoic acid, 6-[(1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L3 ANSWER 13 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2003:651909 CAPLUS
 DOCUMENT NUMBER: 140:42085

TITLE: A practical oxone-mediated, high-throughput, solution-phase synthesis of benzimidazoles from 1,2-phenylenediamines and aldehydes and its application to preparative scale synthesis

AUTHOR(S): Beaulieu, Pierre L.; Hache, Bruno; Von Moos, Elisabeth

CORPORATE SOURCE: Research and Development, Boehringer Ingelheim (Canada) Ltd., Laval, QC, H7S 2G5, Can.

SOURCE: Synthesis (2003), (11), 1683-1692

CODEN: SYNTBF; ISSN: 0039-7881

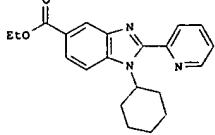
Georg Thieme Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 140:42085

GI



I

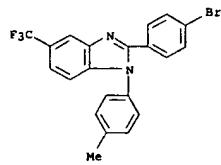
AB Addition of oxone to a mixture of a 1,2-phenylenediamine and an aldehyde gave benzimidazoles, e.g., I, under mild conditions. The reaction was applicable to a wide range of substrates including aliphatic, aromatic, and heteroarom. aldehydes, and was not significantly affected by steric or electronic effects. In most cases, crude products are isolated in good to excellent yields and homogeneities by simple precipitation or extraction from the reaction mixture and did not require addnl. purification. Limitations to the scope of this methodol. were encountered in cases where aldehydes were sensitive to oxone under the acidic reaction conditions. The features of this methodol. make it particularly well suited for the high-throughput, solution-phase synthesis of benzimidazole libraries. The low cost and simplicity of this procedure makes it equally attractive for preparative-scale syntheses where safety and environmental issues are of greater concern.

IT 637041-79-3P 637041-80-6P

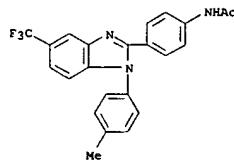
RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of benzimidazoles via amination of nitroaryl chlorides

with

L3 ANSWER 13 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 primary amines followed by redn. and oxone-mediated heterocyclization with aldehydes)
 RN 637041-79-3 CAPLUS
 CN 1H-Benzimidazole,
 2-(4-bromophenyl)-1-(4-methylphenyl)-5-(trifluoromethyl)-
 (9CI) (CA INDEX NAME)



RN 637041-80-6 CAPLUS
 CN Acetamide,
 N-[2-(1-(4-methylphenyl)-5-(trifluoromethyl)-1H-benzimidazol-2-yl)phenyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L3 ANSWER 14 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2003:133404 CAPLUS
 DOCUMENT NUMBER: 130:165718

TITLE: Probes for direct binding assay for identifying inhibitors of hepatitis C virus RNA-dependent RNA polymerase

INVENTOR(S): Kukolj, George; Beaulieu, Pierre L.; McKercher, Ginevra

PATENT ASSIGNEE(S): Boehringer Ingelheim (Canada) Ltd., Can.

SOURCE: PCT Int. Appl., 125 pp.

DOCUMENT TYPE: Patent

LANGUAGE: English

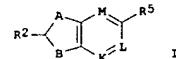
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003014377	A2	20030220	WO 2002-CR1214	20020805
WO 2003014377	A3	20031218		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MW, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UG, VN, VU, ZA, ZM, ZW				
RW: GH, JA, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, UG, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SE, TZ, TO				
US 2003161862	A1	20030612	US 2002-211455	20020802
CA 2450142	A1	20030220	CA 2002-2450142	20020805
EP 1417493	A2	20040512	EP 2002-753998	20020805
R: AP, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RU, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 200550055	T2	20050106	JP 2003-519506	20020805
PRIORITY APPLN. INFO.:			US 2001-310272P	P 20010807
			WO 2002-CR1214	W 20020805

OTHER SOURCE(S): MARPAT 130:165718
 GI

L3 ANSWER 14 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



AB A method for identifying compds. binding to hepatitis C virus (HCV) RNA-dependent RNA polymerase is provided. HCV polymerase or an analog is contacted with a probe formula I, wherein A is O, S, N, NR1, or CR1, wherein R1 is defined as either a single or a double bond; R2 is selected from H, halogen, R21, OR21, SR21, COOR21, SO2N(R22)2, N(R22)2, NR22C(O)R22 or NR22C(O)NR22, wherein R21 and each R22 is defined herein;

B is NR3 or CR3, wherein R3 is defined herein; with the proviso that, when A is not N, then one of A or B is either CR1 or CR3, K is N or CR4, wherein R4 is defined herein; L is N or CR5, wherein R5 has the same definition as R4 defined above; M is N or CR7, wherein R7 has the same definition as R4 defined above; R3 is C(Y)1 wherein Y1 is O or S; and Z is N(R6a)R6 or OR6,

wherein R6a is H or alkyl or NR61R62 wherein R61 and R62 are defined herein; and R6 is H, alkyl, cycloalkyl, alkenyl, Het, alkyl-aryl, alkyl-Het; or R6 is wherein R7 and R4 are as defined above; Y2 is

O or S; R9 is H, (C1-6 alkyl), (C3-7)cycloalkyl or (C1-6)alkyl-(C3-7)cycloalkyl, aryl, Het, (C1-6)alkyl-aryl or (C1-6)alkyl-Het, all of which

optionally substituted with R90; or R9 is covalently bonded to either of R7 or R8 to form a 5- or 6-membered heterocycle; or a salt thereof; where the probe comprises a detectable label attached to any suitable position, whereby said probe binds to an HCV polymerase or an analog thereof and is capable of being displaced by an inhibitor thereof. The association of a specific probe with the HCV NS5B polymerase can be monitored and quantified directly by a change in the intrinsic spectral properties of a tagged or un-tagged NS5B protein and/or by a change in the intrinsic spectral properties of a specific probe. A direct measurement of inhibitor-NS5B association can also be achieved by immobilizing one of these two components on a matrix and measuring association through plasma-resonance detection technol. An assay that quantifies probe-NS5B complex association

L3 ANSWER 14 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 may also incorporate a photo-reactive label (such as phenyl-azide or benzophenone) on the probe and measure the amt. of label irreversibly bound to the NS5B adduct following photo-activation of the probe. Thus, titrn. of fluorescein-labeled probe II (FL = 5-thiocarbonylaminofluorescein) with the enzyme was measured with excitation

wavelength at 493 nm and emission monitored at 530 nm, indicating a K_d value of 6 nM, which is ≈ 100 -fold higher for HCV polymerase than obtained with the GBV-B polymerase. A major advantage of the direct binding assay is that different affinities for the primer/template RNA substrate with N-terminal tag His-NS5BA21 and C-terminal tag NS5BA21-His are reconciled by relatively similar K_d values that individual inhibitors display with the two different HCV polymerases.

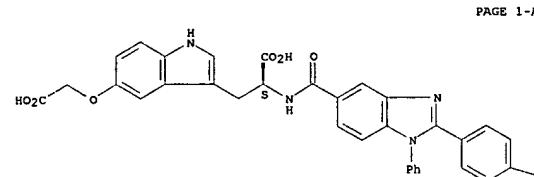
IT 497844-93-6P 497844-94-7P 497844-95-8P

RL: ARG (Analytical reagent used); SPN (Synthetic preparation); ANST (Analytical study); PRGP (Preparation); USES (Uses)
 (probes for direct binding assay for identifying inhibitors of hepatitis C virus RNA-dependent RNA polymerase)

RN 497844-93-6 CAPLUS

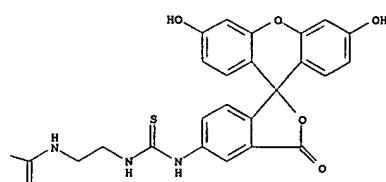
CN L-Tryptophan, 5-(carboxymethoxy)-N-[(2-[4-[(2-[(3',6'-dihydroxy-3-oxaspiro[isobenzofuran-1(3H),9'-[9H]xanthene]-5-yl)amino]thioxomethyl]aminoethyl)amino]carbonyl)phenyl]-1-phenyl-1H-benzimidazol-5-yl]carbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 14 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

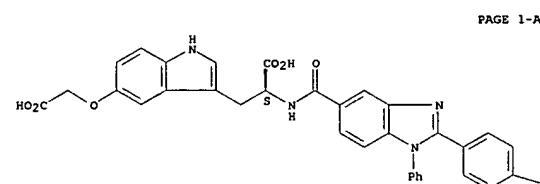
PAGE 1-B



RN 497844-94-7 CAPLUS

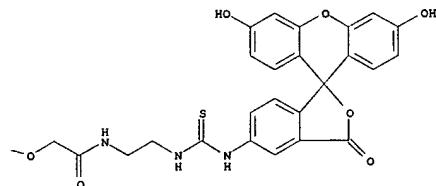
CN L-Tryptophan, 5-(carboxymethoxy)-N-[(2-[4-[(2-[(3',6'-dihydroxy-3-oxaspiro[isobenzofuran-1(3H),9'-[9H]xanthene]-5-yl)amino]thioxomethyl]aminoethyl)amino]2-exothoxyphenyl)-1-phenyl-1H-benzimidazol-5-yl]carbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 14 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-B

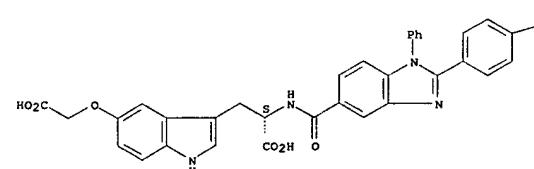


RN 497844-95-8 CAPLUS

CN L-Tryptophan, 5-(carboxymethoxy)-N-[(2-[4-[(2-[(5-(dimethylamino)-1-naphthalenyl)sulfonyl]aminoethyl)amino]-2-oxoethoxyphenyl)-1-phenyl-1H-benzimidazol-5-yl]carbonyl- (9CI) (CA INDEX NAME)

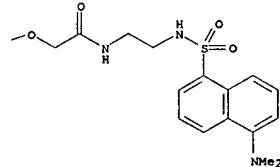
Absolute stereochemistry.

PAGE 1-A



L3 ANSWER 14 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-B

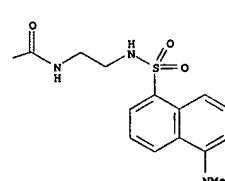
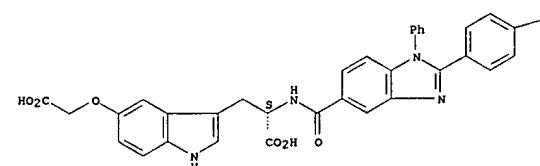


RN 497844-96-9 CAPLUS

CN L-Tryptophan, 5-(carboxymethoxy)-N-[(2-[4-[(2-[(5-(dimethylamino)-1-naphthalenyl)sulfonyl]aminoethyl)amino]carbonyl)phenyl)-1-phenyl-1H-benzimidazol-5-yl]carbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

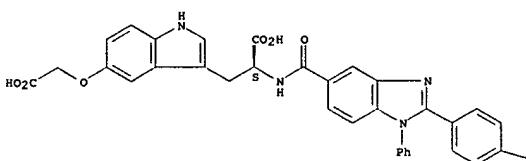
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L3 ANSWER 14 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

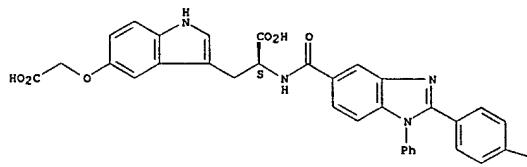
RN 497844-97-0 CAPLUS
 CN L-Tryptophan, N-[2-[4-[2-[(2-[(4-azidobenzoyl)amino]ethyl]amino]-2-oxethoxy]phenyl]-1-phenyl-1H-benzimidazol-5-yl]carbonyl]-5-(carboxymethoxy)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 14 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

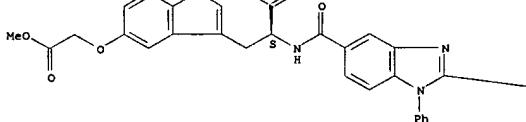
PAGE 1-A



RN 497844-98-1 CAPLUS
 CN L-Tryptophan, N-[2-[4-[2-[(2-benzoylbenzoyl)amino]ethyl]amino]-2-oxethoxy]phenyl]-1-phenyl-1H-benzimidazol-5-yl]carbonyl]-5-(carboxymethoxy)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



IT 497845-01-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (probes for direct binding assay for identifying inhibitors of hepatitis C virus RNA-dependent RNA polymerase)

RN 497845-01-9 CAPLUS
 CN L-Tryptophan, N-[2-[4-[2-[(2-aminoethyl)amino]-2-oxethoxy]phenyl]-1-phenyl-1H-benzimidazol-5-yl]carbonyl]-5-(2-methoxy-2-oxethoxy)-, methyl ester, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 497845-00-8
 CMF C39 H38 N6 O8

Absolute stereochemistry.

L3 ANSWER 14 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L3 ANSWER 15 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

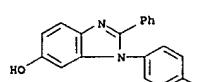
ACCESSION NUMBER: 2002:855869 CAPLUS
 DOCUMENT NUMBER: 139:179987
 TITLE: Product class 4: benzimidazoles
 AUTHOR(S): Grimmett, M. R.
 CORPORATE SOURCE: Organic Chemistry, Dept. of Chemistry, University of Otago, Dunedin, N. Z.
 SOURCE: Science of Synthesis (2002), 12, 529-612
 PUBLISHER: Georg Thieme Verlag
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: English
 AB: A review. Methods for preparing benzimidazoles are reviewed covering annulations to arenes, ring transformations, and aromatization. Modification of benzimidazole substituents are also included.
 IT 117125-04-9P 117125-06-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (review of preparation of benzimidazoles via cyclization, ring transformations, aromatization and modification of substituents)

RN 117125-04-9 CAPLUS
 CN 1H-Benzimidazol-6-ol, 1,2-diphenyl- (9CI) (CA INDEX NAME)

CM 2
 CRN 76-05-1
 CMF C2 H F3 O2



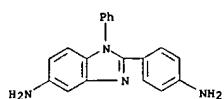
RN 117125-06-1 CAPLUS
 CN 1H-Benzimidazol-6-ol, 1-(4-methoxyphenyl)-2-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 497 THERE ARE 497 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L3 ANSWER 16 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2002-043291 CAPLUS
 DOCUMENT NUMBER: 139:157283
 TITLE: New photosensitive polyimide composites for optical technologies
 AUTHOR(S): Aleksandrova, E. L.; Nosova, G. I.; Romashkova, K.
 A.: Galaktionova, E. F.; Yurre, T. A.; Kudryavtsev, V.
 V.: Rudaya, L. I.; Klimova, N. V.
 CORPORATE SOURCE: S. I. Vavilov State Optical Institute, St. Petersburg, Russia
 SOURCE: Journal of Optical Technology (Translation of Opticheskii Zhurnal) (2002), 69(10), 706-710
 PUBLISHER: Optical Society of America
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB An electrophotog. method has been used to study the photocond. in layers of new thermally stable soluble polyimides (PIs) distinguished by the structure of the donor benzimidazole and acceptor diimide fragments of the polymer chains and its sensitization by tetrannitrofluorenone and by various classes of dyes. It is shown that the synthesized polymers possess intrinsic photosensitivity at a level of 3-103-104 cm²/J in the spectral region up to 450 nm. The photosensitivity achieved for the sensitized PIs (3-105-2-104 cm²/J in the spectral region 400-700 nm) shows that the synthesized PI materials are promising for creating recording media and liquid-crystal modulators.
 IT 569674-44-0P 569674-47-1P 569674-48-2P
 569674-49-3P 569674-50-5P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (electrophotog. conductivity and photosensitivity of polyimide composites)
 RN 569674-44-8 CAPLUS
 CN 1,3-isobenzofurandione, 5,5'-oxybis-, polymer with 2-(4-aminophenyl)-1-phenyl-1H-benzimidazol-5-amine (9CI) (CA INDEX NAME)

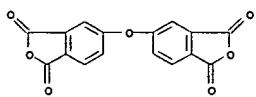
CM 1

CRN 57842-33-8
CMF C19 H16 N4

CM 2

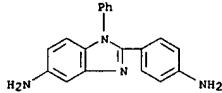
CRN 57842-33-8
CMF C19 H16 N4

L3 ANSWER 16 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 CRN 1823-59-2
CMF C16 H6 O7

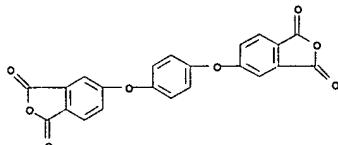


RN 569674-47-1 CAPLUS
 CN 1,3-isobenzofurandione, 5,5'-[1,4-phenylenebis(oxy)]bis-, polymer with 2-(4-aminophenyl)-1-phenyl-1H-benzimidazol-5-amine (9CI) (CA INDEX NAME)

CM 1

CRN 57842-33-8
CMF C19 H16 N4

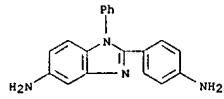
CM 2

CRN 17828-53-4
CMF C22 H10 O8

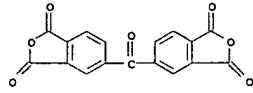
RN 569674-48-2 CAPLUS
 CN 1,3-isobenzofurandione, 5,5'-carbonylbis-, polymer with 2-(4-aminophenyl)-1-phenyl-1H-benzimidazol-5-amine (9CI) (CA INDEX NAME)

L3 ANSWER 16 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CM 1

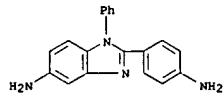
CRN 57842-33-8
CMF C19 H16 N4

CM 2

CRN 2421-28-5
CMF C17 H6 O7

RN 569674-49-3 CAPLUS
 CN 1,3-isobenzofurandione, 5,5'-sulfonylbis-, polymer with 2-(4-aminophenyl)-1-phenyl-1H-benzimidazol-5-amine (9CI) (CA INDEX NAME)

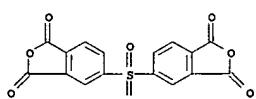
CM 1

CRN 57842-33-8
CMF C19 H16 N4

CM 2

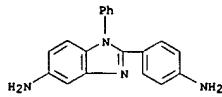
CRN 2540-99-0
CMF C16 H6 O8 S

L3 ANSWER 16 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

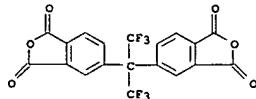


RN 569674-50-6 CAPLUS
 CN 1,3-isobenzofurandione, 5,5'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, polymer with 2-(4-aminophenyl)-1-phenyl-1H-benzimidazol-5-amine (9CI) (CA INDEX NAME)

CM 1

CRN 57842-33-8
CMF C19 H16 N4

CM 2

CRN 1107-00-2
CMF C19 H6 F6 O6

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 17 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:513078 CAPLUS

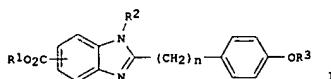
DOCUMENT NUMBER: 137:73258

TITLE: Benzimidazoles and VEGF receptor antagonists containing them
INVENTOR(S): Wada, Hisaya; Asanuma, Hajime; Takayama, Tetsuo; Sato, Masakazu; Yamagishi, Takehiro; Shibuya, Masashi
PATENT ASSIGNEE(S): Taiho Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JI000AF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002193947	A2	20020710	JP 2000-395417	20001226
PRIORITY APPLN. INFO.:			JP 2000-395417	20001226

OTHER SOURCE(S): MARPAT 137:73258
GI



AB Vascular endothelial growth factor receptor antagonists contain benzimidazoles I (R1 = H, Cl-6 alkyl; R2 = H, C6H4CO2R4; R4 = H, Cl-6 alkyl; n = 0-2) or their salts. M-H2NCH2CO2Et was condensed with 4,3-F(O2N)C6H3CO2Me, reduced, amidated by p-C18H37OC6H4CH2CH2CO2H, and cyclized to give I (R1 = H, R2 = m-C6H4CO2H, R3 = C18H37, n = 2), which

in vitro inhibited binding of VEGF with IC50 of 0.53 μ M.

IT 440362-29-0P 440362-32-3P

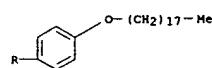
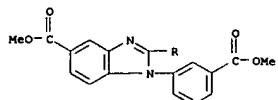
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzimidazoles as VEGF receptor antagonists)

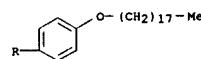
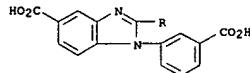
RN 440362-29-8 CAPLUS

CN 1H-Benzimidazole-5-carboxylic acid, 1-(3-(methoxycarbonyl)phenyl)-2-[4-(octadecyloxy)phenyl]-, methyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 17 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 440362-32-3 CAPLUS
CN 1H-Benzimidazole-5-carboxylic acid, 1-(3-carboxyphenyl)-2-[4-(octadecyloxy)phenyl]- (9CI) (CA INDEX NAME)



L3 ANSWER 18 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:449659 CAPLUS

DOCUMENT NUMBER: 137:47196

TITLE: Preparation of benzimidazoles as selective estrogen receptor- β ligand
INVENTOR(S): Barlaam, Bernard; Dock, Steven; Folmer, James
PATENT ASSIGNEE(S): AstraZeneca AB, Swed.
SOURCE: PCT Int. Appl. 1, 46 pp.
CODEN: PIIXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

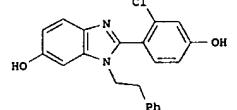
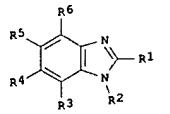
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002046168	A1	20020613	WO 2001-SE2725	20011207
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, T2, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, T2, TM				

W: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG	EP 2002021239	A5	2002-21239	20011207	
AU 2002021239	20020618	AU 2001-999562	20011207		
EP 1341768	A1	20030910	EP 2001-999562	20011207	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR	JP 2004515496	T2	20040527	JP 2002-547907	20011207
PRIORITY APPLN. INFO.:	US 2000-251773P		US 2000-251773P	P 20001207	

US 2000-251776P	P 20001207
SE 2001-8	A 20010102
SE 2001-9	A 20010102
WO 2001-SE2725	W 20011207

OTHER SOURCE(S): MARPAT 137:47196
GI

L3 ANSWER 18 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



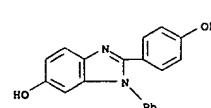
AB Title compds. I [R1 = (un)substituted alkyl, Ph, benzyl, R7; R2 = H, (un)substituted alkyl, Ph(CH2)m, naphthyl(CH2)m, R7(CH2)m; R3 and R6 independently = halo, CN, nitro, (un)substituted alkyl, R8, R80, R85, R82N, R80ZC, R8C=O, R82NCO, R8CORN, etc.; R4 and R5 independently = halo, CN, nitro, R8, R80, R85, R82N, R80ZC, R8C=O, R82NCO, R8CORN, etc.; R7 = (un)substituted 5 or 6-membered heterocycle possessing 0-1 oxo groups and/or 0-1 fused benzene rings; R8 = H, alkyl, haloalkyl, Ph or benzyl; m = 0-3] are prepared and claimed with their pharmaceutically acceptable salts as selective estrogen receptor- β ligands. Thus, II was prepared by substitution of 2-fluoro-1-nitro-4-(2-trimethylsilylthiomethoxy)benzene with phenylethylamine followed by subsequent NO2 reduction, cyclocondensation with Et 2-chloro-4-hydroxybenzaldehyde and deprotection. In estrogen receptor binding assays, I demonstrated activity at 15-2000 nM and selectivity (ER β /ER α) of 30-0.5. As selective ER- β ligands, I are useful in the treatment or prophylaxis of Alzheimer's disease, anxiety disorders, depressive disorders, osteoporosis, cardiovascular disease, rheumatoid arthritis or prostate cancer.

IT 436860-43-4P 436860-50-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(target compound; preparation of benzimidazoles as selective estrogen receptor- β ligand via cyclocondensation of diaminobenzimidates)

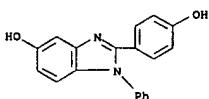
RN 436860-43-4 CAPLUS

CN 1H-Benzimidazol-6-ol, 2-(4-hydroxyphenyl)-1-phenyl- (9CI) (CA INDEX NAME)



L3 ANSWER 18 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 436860-50-3 CAPLUS
CN 1H-Benzimidazol-5-ol, 2-(4-hydroxyphenyl)-1-phenyl- (9CI) (CA INDEX
NAME)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

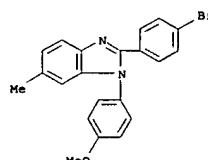
L3 ANSWER 19 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:361401 CAPLUS
DOCUMENT NUMBER: 137:232591
TITLE: Polymer-assisted parallel solution phase synthesis of substituted benzimidazoles
AUTHOR(S): Yun, Young K.; Porco, John A., Jr.; Labadie, Jeff
CORPORATE SOURCE: Argonaut Technologies, Foster City, CA, 94404, USA
SOURCE: Synlett (2002), (5), 739-742
CODEN: SYNLES; ISSN: 0936-5214
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 137:232591
AB A small library of benzimidazoles was prepared using polymer-bound reagents

and scavengers. Polymer-assisted reaction of phenylenediamines with carboxylic acids yielded *o*-amidophenylamines in the presence of polystyrene-carbodiimide (PS-carbodiimide) using 1-hydroxy-7-azabenzotriazole (HOAT) as additive. Excess HOAT was scavenged post-reaction using polystyrene-trisamine (PS-trisamine) resin. Treatment

Treatment of *o*-amidophenylamines with AcOH facilitated acid-catalyzed cyclodehydration to afford benzimidazoles in good yields and excellent purities.

IT 457867-00-49
RL: CPN (Combinatorial preparation); CMBI (Combinatorial study); PREP (Preparation)
(polymer-assisted parallel solution phase synthesis of substituted benzimidazoles).

RN 457867-00-4 CAPLUS
CN 1H-Benzimidazole, 2-(4-bromophenyl)-1-(4-methoxyphenyl)-6-methyl- (9CI)
(CA INDEX NAME)



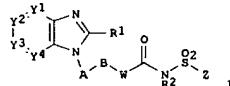
REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

13 ANSWER 20 OF 81 CAPLUS COPYRIGHT 2006 ACS ON STN
ACCESSION NUMBER: 2002:314939 CAPLUS
DOCUMENT NUMBER: 136:340677
TITLE: Preparation of imidazooarenes as antiinflammatory and analgesic agents.
INVENTOR(S): Nakao, Kazuharu; Okumura, Yoshiyuki; Matsumizu, Miyako; Ueno, Naomi; Hashizume, Yoshinobu; Kato, Tomoki; Kawai, Akiyoshi; Miyake, Yoriko; Nukui, Seiji;
PATENT ASSIGNEE(S): Shinjyo, Katsuhiro; Taniguchi, Kana
SOURCE: Pfizer Pharmaceuticals Inc., Japan; Pfizer Inc.
PCT Int. App. 461 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002032900	A2	20020425	WO 2001-IB1940	20011015
WO 2002032900	A3	20020808		
W: AE, AG, AL, AH, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, C2, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TZ, TM, TR, TT, T2, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG				
CA 2426457	AA	20020425	CA 2001-2426457	20011015
AU 2002101796	A5	20020429	AU 2002-10796	20011015
US 2002077329	A1	20020620	US 2001-977761	20011015
US 2002107273	A1	20020808	US 2001-977621	20011015
US 6710054	B2	20040323		
EP 1326684	A2	20030716	EP 2001-978702	20011015
EP 1326684	B1	20060315		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
EE 20030190	A	20031015	EE 2003-190	20011015
BR 200114704	A	20040225	BR 2001-14704	20011015
JP 2004517054	T2	20040610	JP 2002-536292	20011015
NZ 525163	A	20050930	NZ 2001-525163	20011015
AT 320428	E	20060415	AT 2001-978702	20011015
BG 107699	A	20031231	BG 2003-107699	20030403
NO 2003001582	A	20030617	NO 2003-1582	20030403
ZA 2003002722	A	20040408	ZA 2003-2722	20030408
ZA 2003002991	A	20040416	ZA 2003-2991	20030416
US 2004181059	A1	20040916	US 2004-771696	20040204
PRIORITY APPLN. INFO.:			US 2000-2417825P	P 2001001015
			US 2001-977621	A3 20011015
			WO 2001-IB1940	W 20011015

OTHER SOURCE(S): MARPAT 136:340677
GI

L3 ANSWER 20 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

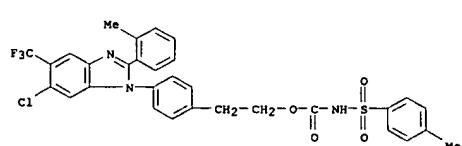


AB Title compd. (I; Y1-Y4 = N, CH, CL; R1 = H, (substituted) alkyl, alkynyl, alkyanyl, cycloalkyl, alkoxy, pyrrolidinyl, amino, etc.; A = (substituted) 5-6 membered monocyclic aromatic ring optionally containing up to 3 heteroatoms

selected from O, N, S, etc.; B = halo-substituted alkylene, cycloalkylene, alkylene, alkynylene, alkyleneoxy, etc., optionally substituted with an oxo group; W = amino, O, S, bond, etc.; R₂ = H, OH alkyl, alkoxy; Z = 5-12 membered (substituted) monocyclic or bicyclic aryl optionally containing up to 3 heteroatoms selected from O, N and S,

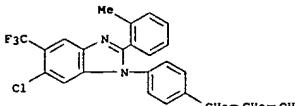
etc.; L = halo, alkyl, haloalkyl, OH, alkoxy, haloalkoxy, alkylthio, NO₂, amino, etc.), were prepared as prostaglandin E2 receptor antagonists, preferably as EP₄ receptor antagonists. Thus, to 2-[4-(2-ethyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridin-3-yl)phenyl]ethylamine (preparation given) in CH₂Cl₂ was added p-toluenesulfonyl isocyanate followed by stirring for 3 h to give 56% 2-ethyl-5,7-dimethyl-3-[4-[2-[[4-(methylphenyl)sulfonyl]amino]carbon

antinflammatory and analgesic agents)
RN 415906-84-2 CAPLUS
CN Carbamic acid, [(4-methylphenyl)sulfonyl]-, 2-[4-[6-chloro-2-(2-methylphenyl)-5-(trifluoromethyl)-1H-benzimidazol-1-yl]phenyl]ethyl ester (9CI) (as TURPE VAPSI)



IT 415913-33-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

L3 ANSWER 20 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 (Reactant or reagent)
 (prepn. of imidazobenzene prostaglandin EP4 receptor antagonists as
 antiinflammatory and analgesic agents)
 RN 415913-33-6 CAPLUS
 CN Benzenethanol, 4-[6-chloro-2-(2-methylphenyl)-5-(trifluoromethyl)-1H-benzimidazol-1-yl]- (9CI) (CA INDEX NAME)



L3 ANSWER 21 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 (Reactant or reagent)
 Preparation of benzimidazole derivatives as
 prostaglandin EP4 receptor inhibitors to treat
 rheumatoid arthritis
 INVENTOR(S): Audoly, Laurent; Okumura, Takako; Shimono, Masato
 PATENT/ASSIGNEE(S): Pfizer Pharmaceuticals Inc., Japan; Pfizer Inc.
 SOURCE: PCT Int. Appl., 468 pp.
 CODEN: PIIXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002032422	A2	20020425	WO 2001-IB1942	20011015
WO 2002032422	A3	20020725		
W: AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MM, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GR, IE, IT, LU, MC, NL, PT, SE, TR, BE, BJ, CF, CG, CI, CN, GA, GU, IQ, GW, ML, MR, NE, SN, TD, TR				
CA 2426487	AA	20020425	CA 2001-2426487	20011015
AU 2001094122	A5	20020429	AU 2001-94122	20011015
US 2002077329	A1	20020620	US 2001-977761	20011015
US 2002107273	A1	20020809	US 2001-977621	20011015
US 6710054	B2	20040323		
BR 2001014758	A	20030701	BR 2001-14758	20011015
EP 1326606	A2	20030716	EP 2001-974609	20011015
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, MK, CY, AD, TR				
EE 200300188	A	20031015	EE 2003-188	20011015
JP 2004511518	T2	20040415	JP 2002-535660	20011015
AT 320428	E	20060415	AT 2001-978702	20011015
ZA 2003002722	A	20040404	ZA 2003-2722	20030404
NO 2003001658	A	20030610	NO 2003-1658	20030410
BG 107732	A	20040130	BG 2003-107732	20030416
ZA 2003002991	A	20040416	ZA 2003-2991	20030416
US 2004181059	A1	20040916	US 2004-771696	20040204
PRIORITY APPLN. INFO.:			US 2000-241825P	P 20001019
OTHER SOURCE(S):			US 2001-977621	A3 20011015
GI			WO 2001-IB1942	W 20011015

L3 ANSWER 21 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

AB Benzimidazole derivs. I wherein Y1-Y4 are independently N, CH, alkyl, alkoxy, haloalkyl, halo, substituted alkyl, R1 is H, alkyl, alkenyl, alkynyl, cycloalkyl, alkoxy, haloalkoxy, heterocycle; R2 is H, alkyl, alkoxy, OH; A is substituted heterocycle arom ring; B is haloalkylene, cycloalkylene, alkenylene, alkynylene, oxalkylene; W is NH, aminoalkyl, O, S, or oxime, covalent bond; Z is monocyclic and bicyclic aromatic heterocycle, were prepared as prostaglandin EP4 receptor inhibitors to treat rheumatoid arthritis of rats and human. Also featured is a method of identifying agents that selectively inhibit EP4 activity in vivo. Thus, 3-(4-(2-((3,4-dichlorophenyl)sulfonyl)amino)carbonyl)aminoethylphenyl)-2-ethyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridine, hydrochloride was prepared and tested in vivo as an agent selectively inhibiting EP4 activity or selectively binding EP4; and measuring joint inflammation, joint swelling, joint ankylosis, interleukin (IL)-6, SAA protein, and/or joint mobility.

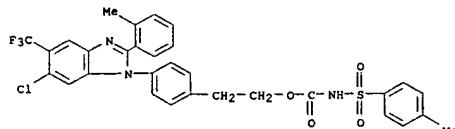
 IT 415906-84-29

 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

 (preparation of benzimidazole derivs. as prostaglandin ep receptor inhibitors to treat rheumatoid arthritis)

 RN 415906-84-2 CAPLUS

 CN Carbamic acid, [(4-methylphenyl)sulfonyl]-, 2-[4-[6-chloro-2-(2-methylphenyl)-5-(trifluoromethyl)-1H-benzimidazol-1-yl]phenyl]ethyl ester (9CI) (CA INDEX NAME)



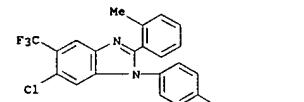
IT 415913-33-6P

 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

 (preparation of benzimidazole derivs. as prostaglandin ep receptor inhibitors to treat rheumatoid arthritis)

 RN 415913-33-6 CAPLUS

L3 ANSWER 21 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 CN Benzenethanol, 4-[6-chloro-2-(2-methylphenyl)-5-(trifluoromethyl)-1H-benzimidazol-1-yl]- (9CI) (CA INDEX NAME)



L3 ANSWER 22 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2002:111104 CAPLUS

DOCUMENT NUMBER: 137:63709

TITLE: Third Harmonic Generation in Copolymer Films with
 Optically Nonlinear N-Substituted 4-Nitroazobenzene

in

AUTHOR(S): Lebedeva, G. K.; Loretsyan, N. L.; Ivanova, V. N.;
 Romashkova, K. A.; Lukoshkin, V. A.; Kudryavtsev, V.
 V.

CORPORATE SOURCE: Institute of High-Molecular Compounds, Russian
 Academy

of Sciences, St. Petersburg, 199004, Russia
 Physics of the Solid State (Translation of Fizika
 Tverdogo Tela (Sankt-Peterburg)) (2002), 44(2),
 395-398

CODEN: PSEOSD; ISSN: 1063-7834

PUBLISHER: Naukova/Interperiodica Publishing

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The third-order nonlinear optical susceptibility $\chi(3)(3\omega)$,
 $\omega, 2\omega, \omega$ of two types of copolymer films containing
 optically nonlinear N-substituted nitroazobenzene in the side
 (methacrylic
 series copolymers) and main (copolyimidoamido esters) polymer chains is
 investigated using the third harmonic generation method at a wavelength
 of

1.064 μ m.

IT 439120-20-4P 439120-22-6P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (third harmonic generation in films of copolymers containing
 nitroazobenzeneamine groups)

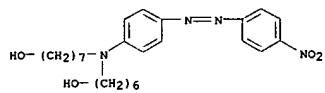
RN 439120-20-4 CAPLUS

CN 1H-1soindole-5-carbonyl chloride,
 2-[4-(chlorocarbonyl)phenyl]-2,3-dihydro-
 1,3-dioxo-, polymer with 2-[4-aminophenyl]-1-phenyl-1H-benzimidazol-6-
 amine and 7-[6-hydroxyhexyl]-4-[4-nitrophenyl]azophenyl]amino]-1-
 heptanol (9CI) (CA INDEX NAME)

CM 1

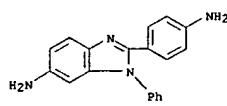
CRN 439120-17-9

CMF C25 H36 N4 O4



CM 2

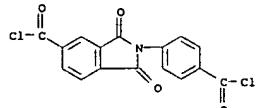
L3 ANSWER 22 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 CRN 181189-60-6
 CMF C19 H16 N4



CM 3

CRN 29747-29-3

CMF C16 H7 Cl2 N O4



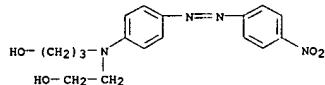
RN 439120-22-6 CAPLUS

CN 1H-1soindole-5-carbonyl chloride,
 2-[4-(chlorocarbonyl)phenyl]-2,3-dihydro-
 1,3-dioxo-, polymer with 2-(4-aminophenyl)-1-phenyl-1H-benzimidazol-6-
 amine and 3-[2-hydroxyethyl]-4-[4-(4-nitrophenyl)azophenyl]amino]-1-
 propanol (9CI) (CA INDEX NAME)

CM 1

CRN 439120-21-5

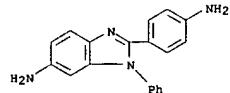
CMF C17 H20 N4 O4



CM 2

CRN 181189-60-6

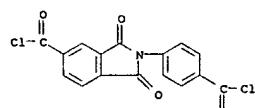
L3 ANSWER 22 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 CMF C19 H16 N4



CM 3

CRN 29747-29-3

CMF C16 H7 Cl2 N O4



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR
 THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE
 FORMAT

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2001:526062 CAPLUS
 DOCUMENT NUMBER: 135:107328

TITLE: Preparation of 1,7-dimethylbenzimidazolealkanoates and
 analogs for treatment of disorders mediated by
 microglia activation

INVENTOR(S): Kuhnke, Joachim; Heibrodt, Wolfgang; Moenning,

Ursula; Schaefer, Antingesellschaft, Germany

PATENT ASSIGNEE(S): PCT Int. Appl., 141 pp.

SOURCE: CODEN: PIXAD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

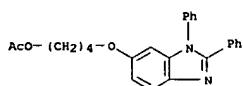
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001051473	A1	20010719	WO 2001-EP334	20010112
W: AS, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MZ, NO, NZ, PL, PT, RO, RU, SE, TR, SE, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA,				
CA 2396227	PA	20010719	CA 2001-2396227	20010112
BR 2001007628	A	20021008	BR 2001-7628	20010112
EP 1246808	A1	20021009	EP 2001-915133	20010112
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003523961	T2	20030812	JP 2001-551855	20010112
EE 200200390	A	20031015	EE 2002-390	20010112
NZ 519326	A	20050225	NZ 2001-519326	20010112
AU 782993	B2	20050915	AU 2001-42255	20010112
US 2002006948	A1	20020117	US 2001-759360	20010116
BG 106821	A	20030131	BG 2001-100021	20020613
NO 2002003362	A	20020913	NO 2002-3362	20020712
ZA 2002006470	A	20040219	ZA 2002-6470	20020813
US 2006094770	A1	20060504	US 2005-299135	20051208
			DE 2000-10002898	A 20000114
			US 2000-178324P	P 20000127
			WO 2001-EP334	W 20010112
			US 2001-759360	A3 20010116

OTHER SOURCE(S): MARPAT 135:107328
 GI

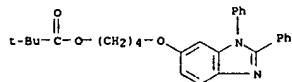
Instant App.

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

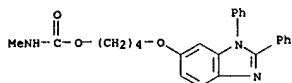
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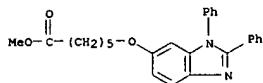
RN 350231-47-9 CAPLUS
 CN Propanoic acid, 2,2-dimethyl-, 4-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]butyl ester (9CI) (CA INDEX NAME)



RN 350231-48-0 CAPLUS
 CN 1-Butanol, 4-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, methyl carbamate (ester) (9CI) (CA INDEX NAME)



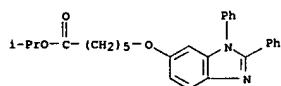
RN 350231-49-1 CAPLUS
 CN Hexanoic acid, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



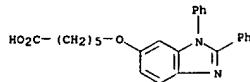
RN 350231-50-4 CAPLUS
 CN Hexanoic acid, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

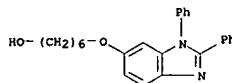
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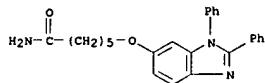
RN 350231-51-5 CAPLUS
 CN Hexanoic acid, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, (9CI) (CA INDEX NAME)



RN 350231-52-6 CAPLUS
 CN 1-Hexanol, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, (9CI) (CA INDEX NAME)



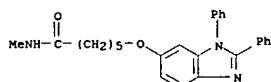
RN 350231-53-7 CAPLUS
 CN Hexanamide, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, (9CI) (CA INDEX NAME)



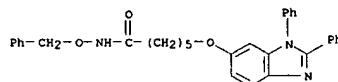
RN 350231-54-8 CAPLUS
 CN Hexanamide, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-N-methyl-, (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

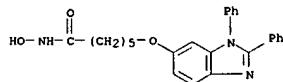
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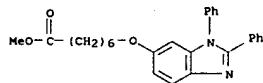
RN 350231-55-9 CAPLUS
 CN Hexanamide, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-N-(phenylmethoxy)- (9CI) (CA INDEX NAME)



RN 350231-56-0 CAPLUS
 CN Hexanamide, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-N-hydroxy-, (9CI) (CA INDEX NAME)



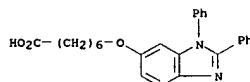
RN 350231-57-1 CAPLUS
 CN Heptanoic acid, 7-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



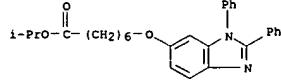
RN 350231-58-2 CAPLUS
 CN Heptanoic acid, 7-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

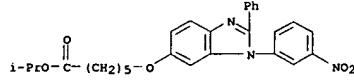
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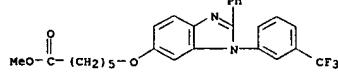
RN 350231-59-3 CAPLUS
 CN Heptanoic acid, 7-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



RN 350231-60-6 CAPLUS
 CN Hexanoic acid, 6-[(1-(3-nitrophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



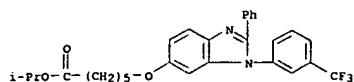
RN 350231-61-7 CAPLUS
 CN Hexanoic acid, 6-[(2-phenyl-1-(3-(trifluoromethyl)phenyl)-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 350231-62-8 CAPLUS
 CN Hexanoic acid, 6-[(2-phenyl-1-(3-(trifluoromethyl)phenyl)-1H-benzimidazol-6-yl)oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

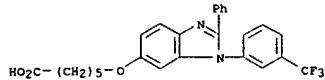
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

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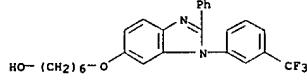
RN 350231-63-9 CAPLUS

CN Hexanoic acid, 6-[(2-phenyl-1-[3-(trifluoromethyl)phenyl]-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



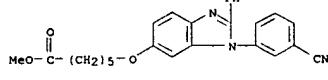
RN 350231-64-0 CAPLUS

CN 1-Hexanol, 6-[(2-phenyl-1-[3-(trifluoromethyl)phenyl]-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



RN 350231-65-1 CAPLUS

CN Hexanoic acid, 6-[(1-(3-cyanophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

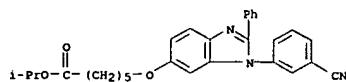


RN 350231-66-2 CAPLUS

CN Hexanoic acid, 6-[(1-(3-cyanophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

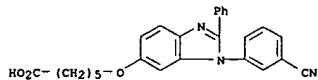
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

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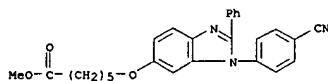
RN 350231-67-3 CAPLUS

CN Hexanoic acid, 6-[(1-(3-cyanophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



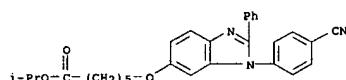
RN 350231-68-4 CAPLUS

CN Hexanoic acid, 6-[(1-(4-cyanophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 350231-69-5 CAPLUS

CN Hexanoic acid, 6-[(1-(4-cyanophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

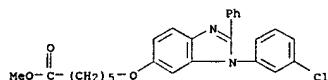


RN 350231-70-8 CAPLUS

CN Hexanoic acid, 6-[(1-(3-chlorophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

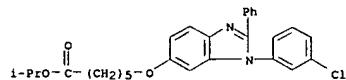
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

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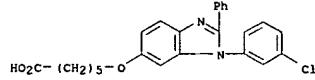
RN 350231-71-9 CAPLUS

CN Hexanoic acid, 6-[(1-(3-chlorophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



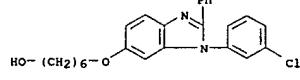
RN 350231-72-0 CAPLUS

CN Hexanoic acid, 6-[(1-(3-chlorophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



RN 350231-73-1 CAPLUS

CN 1-Hexanol, 6-[(1-(3-chlorophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

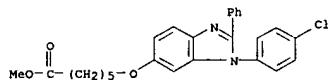


RN 350231-74-2 CAPLUS

CN Hexanoic acid, 6-[(1-(4-chlorophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

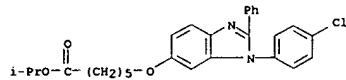
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

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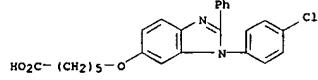
RN 350231-75-3 CAPLUS

CN Hexanoic acid, 6-[(1-(4-chlorophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



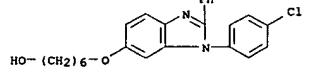
RN 350231-76-4 CAPLUS

CN Hexanoic acid, 6-[(1-(4-chlorophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



RN 350231-77-5 CAPLUS

CN 1-Hexanol, 6-[(1-(4-chlorophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

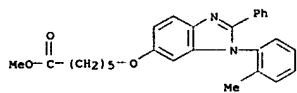


RN 350231-78-6 CAPLUS

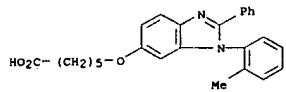
CN Hexanoic acid, 6-[(1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

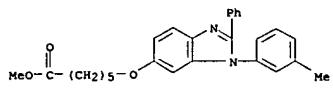
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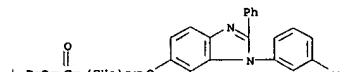
RN 350231-79-7 CAPLUS
 CN Hexanoic acid, 6-((1-(2-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-
 (9CI) (CA INDEX NAME)



RN 350231-80-0 CAPLUS
 CN Hexanoic acid,
 6-((1-(3-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-
 methyl ester (9CI) (CA INDEX NAME)



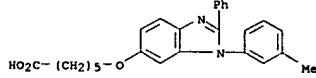
RN 350231-81-1 CAPLUS
 CN Hexanoic acid,
 6-((1-(3-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-
 1-methylhexyl ester (9CI) (CA INDEX NAME)



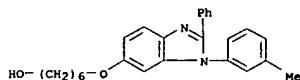
RN 350231-82-2 CAPLUS
 CN Hexanoic acid, 6-((1-(3-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-
 (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

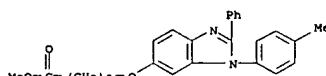
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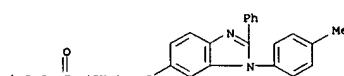
RN 350231-83-3 CAPLUS
 CN 1-Hexanol, 6-((1-(3-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-
 (9CI) (CA INDEX NAME)



RN 350231-84-4 CAPLUS
 CN Hexanoic acid,
 6-((1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-
 methyl ester (9CI) (CA INDEX NAME)



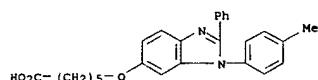
RN 350231-85-5 CAPLUS
 CN Hexanoic acid,
 6-((1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-
 1-methylhexyl ester (9CI) (CA INDEX NAME)



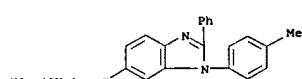
RN 350231-86-6 CAPLUS
 CN Hexanoic acid, 6-((1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-
 (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

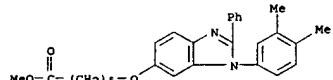
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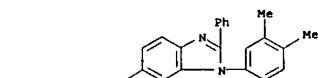
RN 350231-87-7 CAPLUS
 CN 1-Hexanol, 6-((1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-
 (9CI) (CA INDEX NAME)



RN 350231-88-8 CAPLUS
 CN Hexanoic acid, 6-((1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-, methyl ester (9CI) (CA INDEX NAME)



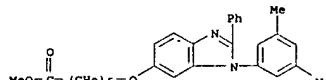
RN 350231-89-9 CAPLUS
 CN Hexanoic acid, 6-((1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)- (9CI) (CA INDEX NAME)



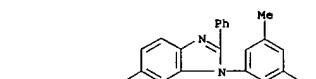
RN 350231-90-2 CAPLUS
 CN Hexanoic acid, 6-((1-(3,5-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-, methyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

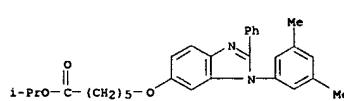
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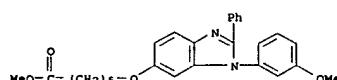
RN 350231-91-3 CAPLUS
 CN Hexanoic acid, 6-((1-(3,5-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)- (9CI) (CA INDEX NAME)



RN 350231-93-5 CAPLUS
 CN Hexanoic acid, 6-((1-(3,5-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-, 1-methylhexyl ester (9CI) (CA INDEX NAME)



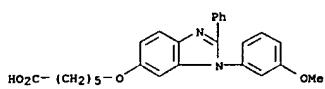
RN 350231-95-7 CAPLUS
 CN Hexanoic acid,
 6-((1-(3-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-
 , methyl ester (9CI) (CA INDEX NAME)



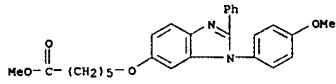
RN 350231-96-8 CAPLUS
 CN Hexanoic acid,
 6-((1-(3-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-
 (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

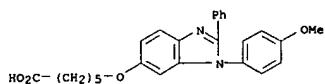
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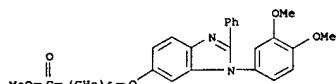
RN 350231-97-9 CAPLUS
 CN Hexanoic acid, 6-[(1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 350231-98-0 CAPLUS
 CN Hexanoic acid, 6-[(1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



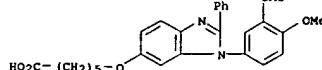
RN 350231-99-1 CAPLUS
 CN Hexanoic acid, 6-[(1-(3,4-dimethoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



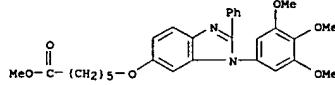
RN 350232-00-7 CAPLUS
 CN Hexanoic acid, 6-[(1-(3,4-dimethoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

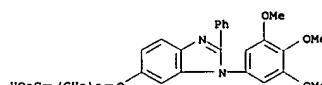
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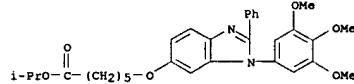
RN 350232-03-0 CAPLUS
 CN Hexanoic acid, 6-[(2-phenyl-1-(3,4,5-trimethoxyphenyl)-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 350232-04-1 CAPLUS
 CN Hexanoic acid, 6-[(2-phenyl-1-(3,4,5-trimethoxyphenyl)-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



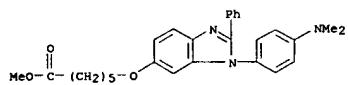
RN 350232-05-2 CAPLUS
 CN Hexanoic acid, 6-[(2-phenyl-1-(3,4,5-trimethoxyphenyl)-1H-benzimidazol-6-yl)oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



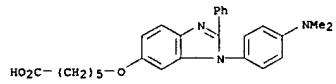
RN 350232-06-3 CAPLUS
 CN Hexanoic acid, 6-[(1-(dimethylamino)phenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

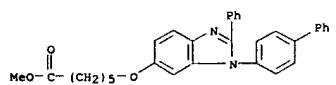
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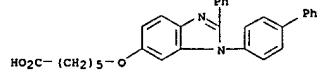
RN 350232-07-4 CAPLUS
 CN Hexanoic acid, 6-[(1-(4-(dimethylamino)phenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



RN 350232-08-5 CAPLUS
 CN Hexanoic acid, 6-[(1-(1,1'-biphenyl)-4-yl-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



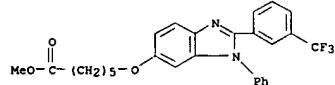
RN 350232-09-6 CAPLUS
 CN Hexanoic acid, 6-[(1-(1,1'-biphenyl)-4-yl-2-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



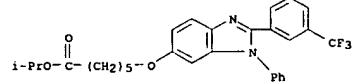
RN 350232-13-2 CAPLUS
 CN Hexanoic acid, 6-[(1-phenyl-2-[3-(trifluoromethyl)phenyl]-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

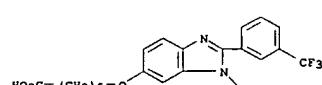
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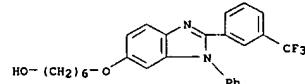
RN 350232-14-3 CAPLUS
 CN Hexanoic acid, 6-[(1-phenyl-2-[3-(trifluoromethyl)phenyl]-1H-benzimidazol-6-yl)oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



RN 350232-15-4 CAPLUS
 CN Hexanoic acid, 6-[(1-phenyl-2-[3-(trifluoromethyl)phenyl]-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



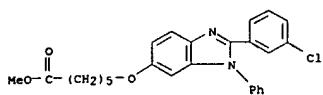
RN 350232-16-5 CAPLUS
 CN 1-Hexanol, 6-[(1-phenyl-2-[3-(trifluoromethyl)phenyl]-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



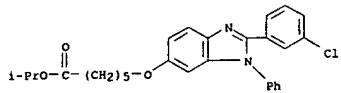
RN 350232-17-6 CAPLUS
 CN Hexanoic acid, 6-[(2-(3-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

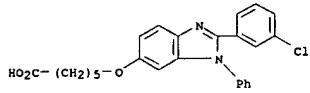
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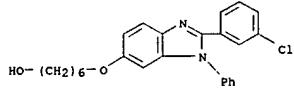
RN 350232-18-7 CAPLUS
 CN Hexanoic acid, 6-[(2-(3-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]-, 1-methylheptyl ester (9CI) (CA INDEX NAME)



RN 350232-19-8 CAPLUS
 CN Hexanoic acid, 6-[(2-(3-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

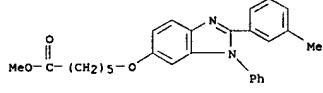


RN 350232-20-1 CAPLUS
 CN 1-Hexanol, 6-[(2-(3-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

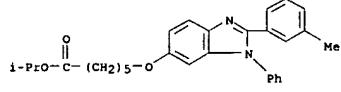


RN 350232-21-2 CAPLUS
 CN Hexanoic acid, 6-[(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

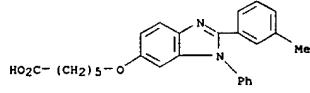
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



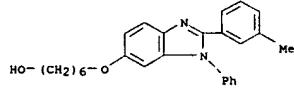
RN 350232-26-7 CAPLUS
 CN Hexanoic acid, 6-[(2-(3-methylphenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]-, 1-methylheptyl ester (9CI) (CA INDEX NAME)



RN 350232-27-8 CAPLUS
 CN Hexanoic acid, 6-[(2-(3-methylphenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



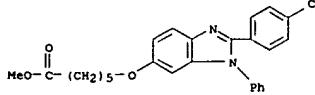
RN 350232-28-9 CAPLUS
 CN 1-Hexanol, 6-[(2-(3-methylphenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



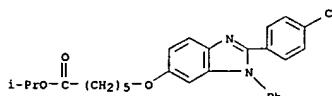
RN 350232-29-0 CAPLUS
 CN Hexanoic acid, 6-[(2-(4-methylphenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

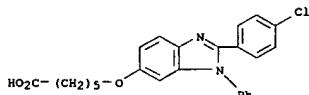
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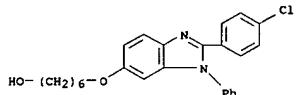
RN 350232-22-3 CAPLUS
 CN Hexanoic acid, 6-[(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]-, 1-methylheptyl ester (9CI) (CA INDEX NAME)



RN 350232-23-4 CAPLUS
 CN Hexanoic acid, 6-[(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



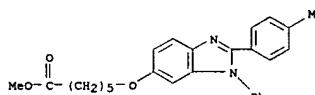
RN 350232-24-5 CAPLUS
 CN 1-Hexanol, 6-[(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



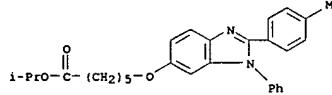
RN 350232-25-6 CAPLUS
 CN Hexanoic acid, 6-[(2-(3-methylphenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]-,

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

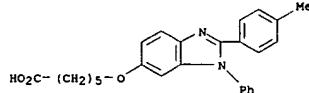
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



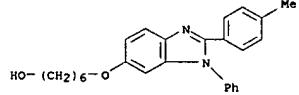
RN 350232-30-3 CAPLUS
 CN Hexanoic acid, 6-[(2-(4-methylphenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]-, 1-methylheptyl ester (9CI) (CA INDEX NAME)



RN 350232-31-4 CAPLUS
 CN Hexanoic acid, 6-[(2-(4-methylphenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

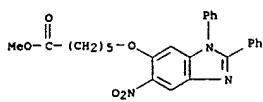


RN 350232-32-5 CAPLUS
 CN 1-Hexanol, 6-[(2-(4-methylphenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

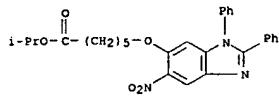


RN 350232-35-8 CAPLUS
 CN Hexanoic acid, 6-[(5-nitro-1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

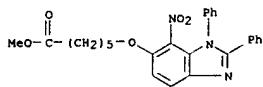
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



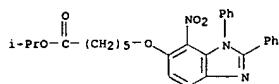
RN 350232-36-9 CAPLUS
 CN Hexanoic acid, 6-[(5-nitro-1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



RN 350232-37-0 CAPLUS
 CN Hexanoic acid, 6-[(7-nitro-1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

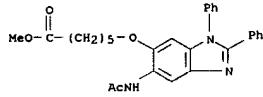


RN 350232-38-1 CAPLUS
 CN Hexanoic acid, 6-[(7-nitro-1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

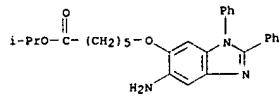


RN 350232-39-2 CAPLUS
 CN Hexanoic acid, 6-[(7-amino-1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

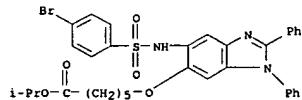
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



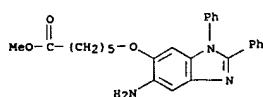
RN 350232-44-9 CAPLUS
 CN Hexanoic acid, 6-[(5-amino-1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



RN 350232-45-0 CAPLUS
 CN Hexanoic acid, 6-[(5-[(4-bromophenyl)sulfonyl]amino)-1,2-diphenyl-1H-benzimidazol-6-yl]oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

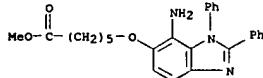


RN 350232-46-1 CAPLUS
 CN Hexanoic acid, 6-[(5-amino-1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

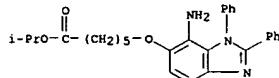


RN 350232-47-2 CAPLUS
 CN Hexanoic acid, 6-[(5-[(4-chlorophenyl)sulfonyl]amino)-1,2-diphenyl-1H-benzimidazol-6-yl]oxy]-, methyl ester (9CI) (CA INDEX NAME)

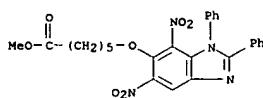
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



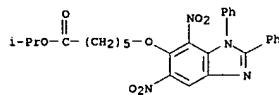
RN 350232-40-5 CAPLUS
 CN Hexanoic acid, 6-[(7-amino-1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



RN 350232-41-6 CAPLUS
 CN Hexanoic acid, 6-[(5,7-dinitro-1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

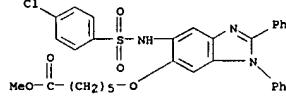


RN 350232-42-7 CAPLUS
 CN Hexanoic acid, 6-[(5,7-dinitro-1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

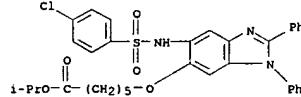


RN 350232-43-8 CAPLUS
 CN Hexanoic acid, 6-[(5-(acetylamino)-1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

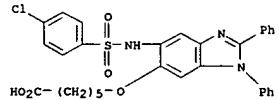
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



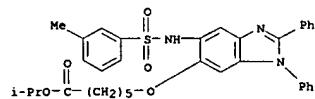
RN 350232-48-3 CAPLUS
 CN Hexanoic acid, 6-[(5-[(4-chlorophenyl)sulfonyl]amino)-1,2-diphenyl-1H-benzimidazol-6-yl]oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



RN 350232-49-4 CAPLUS
 CN Hexanoic acid, 6-[(5-[(4-chlorophenyl)sulfonyl]amino)-1,2-diphenyl-1H-benzimidazol-6-yl]oxy]- (9CI) (CA INDEX NAME)



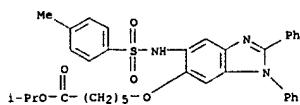
RN 350232-50-7 CAPLUS
 CN Hexanoic acid, 6-[(5-[(3-methylphenyl)sulfonyl]amino)-1,2-diphenyl-1H-benzimidazol-6-yl]oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



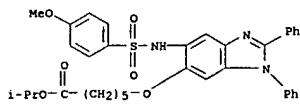
RN 350232-51-8 CAPLUS
 CN Hexanoic acid, 6-[(5-[(4-methylphenyl)sulfonyl]amino)-1,2-diphenyl-1H-benzimidazol-6-yl]oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

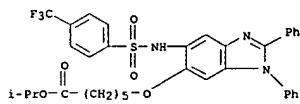
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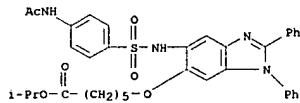
RN 350232-52-9 CAPLUS
 CN Hexanoic acid, 6-[(5-[(4-methoxyphenyl)sulfonyl]amino)-1,2-diphenyl-1H-benzimidazol-6-yl]oxy-, 1-methylethyl ester (9CI) (CA INDEX NAME)



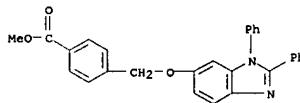
RN 350232-53-0 CAPLUS
 CN Hexanoic acid, 6-[(1,2-diphenyl-5-[(4-(trifluoromethyl)phenyl)sulfonyl]amino)-1H-benzimidazol-6-yl]oxy-, 1-methylethyl ester (9CI) (CA INDEX NAME)



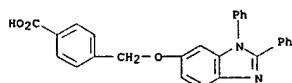
RN 350232-55-2 CAPLUS
 CN Hexanoic acid, 6-[(5-[(4-(acetylaminophenyl)sulfonyl]amino)-1,2-diphenyl-1H-benzimidazol-6-yl]oxy-, 1-methylethyl ester (9CI) (CA INDEX NAME)



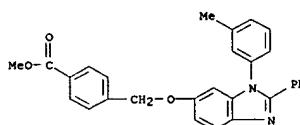
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



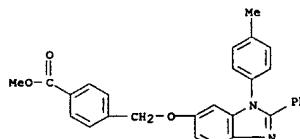
RN 350232-64-3 CAPLUS
 CN Benzoic acid, 4-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]methyl- (9CI) (CA INDEX NAME)



RN 350232-65-4 CAPLUS
 CN Benzoic acid, 4-[(1-(3-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]methyl-, methyl ester (9CI) (CA INDEX NAME)



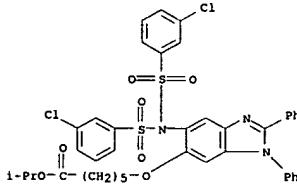
RN 350232-67-6 CAPLUS
 CN Benzoic acid, 4-[(1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]methyl-, methyl ester (9CI) (CA INDEX NAME)



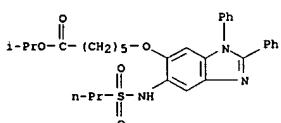
RN 350232-68-7 CAPLUS
 CN Acetic acid, [2-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]ethoxy]-

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

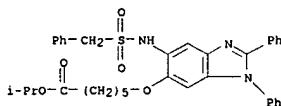
RN 350232-57-4 CAPLUS
 CN Hexanoic acid, 6-[(5-[bis[(3-chlorophenyl)sulfonyl]amino]-1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



RN 350232-59-6 CAPLUS
 CN Hexanoic acid, 6-[(1,2-diphenyl-5-[(propylsulfonyl)amino]-1H-benzimidazol-6-yl)oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

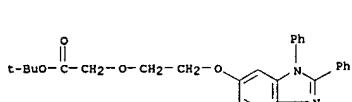


RN 350232-60-9 CAPLUS
 CN Hexanoic acid, 6-[(1,2-diphenyl-5-[(phenylmethyl)sulfonyl]amino)-1H-benzimidazol-6-yl]oxy-, 1-methylethyl ester (9CI) (CA INDEX NAME)

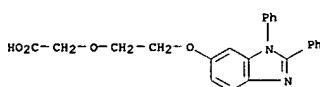


RN 350232-62-1 CAPLUS
 CN Benzoic acid, 4-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]methyl-, methyl ester (9CI) (CA INDEX NAME)

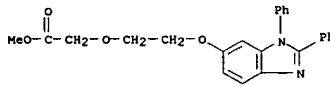
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



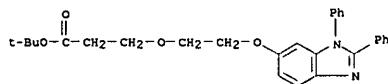
RN 350232-69-8 CAPLUS
 CN Acetic acid, [2-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]ethoxy]- (9CI) (CA INDEX NAME)



RN 350232-70-1 CAPLUS
 CN Acetic acid, [2-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]ethoxy]-, methyl ester (9CI) (CA INDEX NAME)



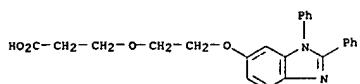
RN 350232-71-2 CAPLUS
 CN Propionic acid, 3-[(2-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]ethoxy)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



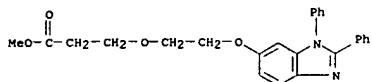
RN 350232-72-3 CAPLUS
 CN Propionic acid, 3-[(2-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]ethoxy)- (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

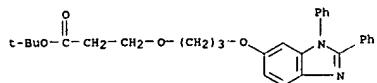
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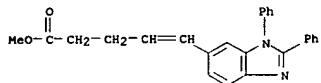
RN 350232-74-5 CAPLUS
 CN Propanoic acid, 3-[2-((1,2-diphenyl-1H-benzimidazol-6-yl)oxy)ethoxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 350232-75-6 CAPLUS
 CN Propanoic acid, 3-[3-((1,2-diphenyl-1H-benzimidazol-6-yl)oxy)propoxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 350232-76-7 CAPLUS
 CN 4-Pentenoic acid, 5-(1,2-diphenyl-1H-benzimidazol-6-yl)-, methyl ester (9CI) (CA INDEX NAME)

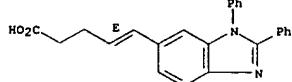


RN 350232-77-8 CAPLUS
 CN 4-Pentenoic acid, 5-(1,2-diphenyl-1H-benzimidazol-6-yl)-, (4E)- (9CI) (CA INDEX NAME)

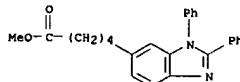
Double bond geometry as shown.

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

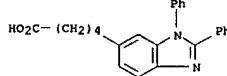
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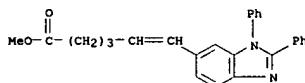
RN 350232-78-9 CAPLUS
 CN 1H-Benzimidazole-6-pentanoic acid, 1,2-diphenyl-, methyl ester (9CI) (CA INDEX NAME)



RN 350232-79-0 CAPLUS
 CN 1H-Benzimidazole-6-pentanoic acid, 1,2-diphenyl- (9CI) (CA INDEX NAME)

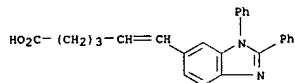


RN 350232-80-3 CAPLUS
 CN 5-Hexenoic acid, 6-(1,2-diphenyl-1H-benzimidazol-6-yl)-, methyl ester (9CI) (CA INDEX NAME)

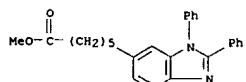


RN 350232-81-4 CAPLUS
 CN 5-Hexenoic acid, 6-(1,2-diphenyl-1H-benzimidazol-6-yl)- (9CI) (CA INDEX NAME)

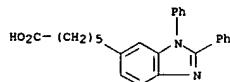
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



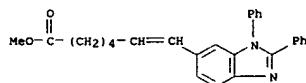
RN 350232-82-5 CAPLUS
 CN 1H-Benzimidazole-6-hexanoic acid, 1,2-diphenyl-, methyl ester (9CI) (CA INDEX NAME)



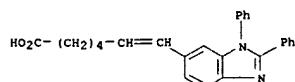
RN 350232-83-6 CAPLUS
 CN 1H-Benzimidazole-6-hexanoic acid, 1,2-diphenyl- (9CI) (CA INDEX NAME)



RN 350232-84-7 CAPLUS
 CN 6-Heptenoic acid, 7-(1,2-diphenyl-1H-benzimidazol-6-yl)-, methyl ester (9CI) (CA INDEX NAME)

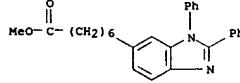


RN 350232-86-9 CAPLUS
 CN 6-Heptenoic acid, 7-(1,2-diphenyl-1H-benzimidazol-6-yl)- (9CI) (CA INDEX NAME)

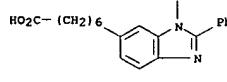


L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

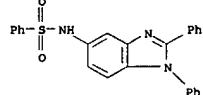
RN 350232-88-1 CAPLUS
 CN 1H-Benzimidazole-6-heptanoic acid, 1,2-diphenyl-, methyl ester (9CI) (CA INDEX NAME)



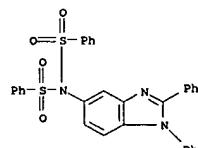
RN 350232-90-5 CAPLUS
 CN 1H-Benzimidazole-6-heptanoic acid, 1,2-diphenyl- (9CI) (CA INDEX NAME)



RN 350232-92-7 CAPLUS
 CN Benzenesulfonamide, N-(1,2-diphenyl-1H-benzimidazol-5-yl)- (9CI) (CA INDEX NAME)

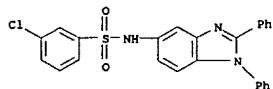


RN 350232-93-8 CAPLUS
 CN Benzenesulfonamide, N-(1,2-diphenyl-1H-benzimidazol-5-yl)-N-(phenylsulfonyl)- (9CI) (CA INDEX NAME)

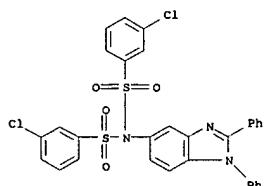


RN 350232-94-9 CAPLUS

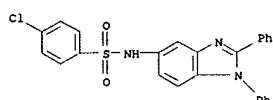
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 CN Benzenesulfonamide, 3-chloro-N-(1,2-diphenyl-1H-benzimidazol-5-yl)- (9CI)
 (CA INDEX NAME)



RN 350232-96-1 CAPLUS
 CN Benzenesulfonamide, 3-chloro-N-((3-chlorophenyl)sulfonyl)-N-(1,2-diphenyl-1H-benzimidazol-5-yl)- (9CI) (CA INDEX NAME)

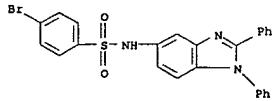


RN 350232-98-3 CAPLUS
 CN Benzenesulfonamide, 4-chloro-N-(1,2-diphenyl-1H-benzimidazol-5-yl)- (9CI)
 (CA INDEX NAME)

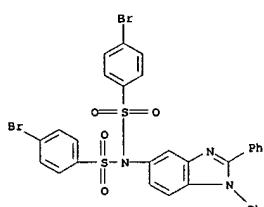


RN 350233-00-0 CAPLUS
 CN Benzenesulfonamide, 4-bromo-N-(1,2-diphenyl-1H-benzimidazol-5-yl)- (9CI)
 (CA INDEX NAME)

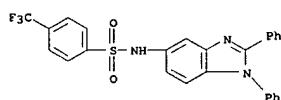
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 350233-02-2 CAPLUS
 CN Benzenesulfonamide, 4-bromo-N-((4-bromophenyl)sulfonyl)-N-(1,2-diphenyl-1H-benzimidazol-5-yl)- (9CI) (CA INDEX NAME)

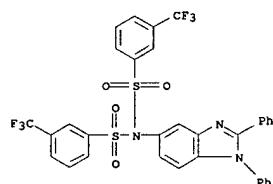


RN 350233-04-4 CAPLUS
 CN Benzenesulfonamide, N-(1,2-diphenyl-1H-benzimidazol-5-yl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

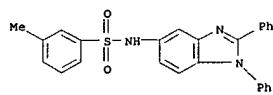


RN 350233-06-6 CAPLUS
 CN Benzenesulfonamide, N-(1,2-diphenyl-1H-benzimidazol-5-yl)-3-(trifluoromethyl)-N-((3-(trifluoromethyl)phenyl)sulfonyl)- (9CI) (CA INDEX NAME)

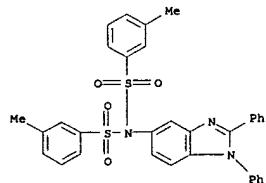
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 350233-08-8 CAPLUS
 CN Benzenesulfonamide, N-(1,2-diphenyl-1H-benzimidazol-5-yl)-3-methyl- (9CI)
 (CA INDEX NAME)

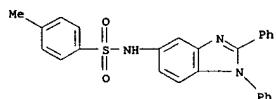


RN 350233-10-2 CAPLUS
 CN Benzenesulfonamide, N-(1,2-diphenyl-1H-benzimidazol-5-yl)-3-methyl-N-(3-methylphenyl)sulfonamide- (9CI) (CA INDEX NAME)

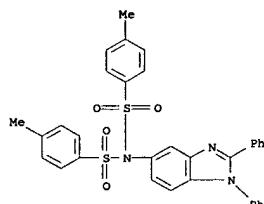


RN 350233-12-4 CAPLUS
 CN Benzenesulfonamide, N-(1,2-diphenyl-1H-benzimidazol-5-yl)-4-methyl- (9CI)
 (CA INDEX NAME)

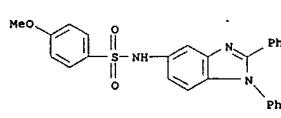
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 350233-14-6 CAPLUS
 CN Benzenesulfonamide, N-(1,2-diphenyl-1H-benzimidazol-5-yl)-4-methyl-N-(4-methylphenyl)sulfonamide- (9CI) (CA INDEX NAME)

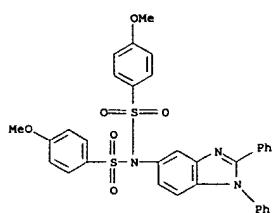


RN 350233-16-8 CAPLUS
 CN Benzenesulfonamide, N-(1,2-diphenyl-1H-benzimidazol-5-yl)-4-methoxy- (9CI)
 (CA INDEX NAME)

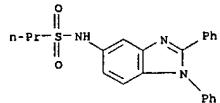


RN 350233-18-0 CAPLUS
 CN Benzenesulfonamide, N-(1,2-diphenyl-1H-benzimidazol-5-yl)-4-methoxy-N-(4-methoxyphenyl)sulfonamide- (9CI) (CA INDEX NAME)

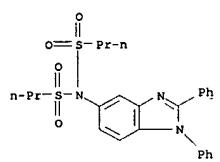
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 350233-20-4 CAPLUS
 CN 1-Propanesulfonamide, N-(1,2-diphenyl-1H-benzimidazol-5-yl)- (9CI) (CA INDEX NAME)

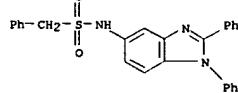


RN 350233-22-6 CAPLUS
 CN 1-Propanesulfonamide, N-(1,2-diphenyl-1H-benzimidazol-5-yl)-N-(propylsulfonyl)- (9CI) (CA INDEX NAME)

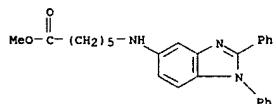


RN 350233-24-8 CAPLUS
 CN Benzenemethanesulfonamide, N-(1,2-diphenyl-1H-benzimidazol-5-yl)- (9CI) (CA INDEX NAME)

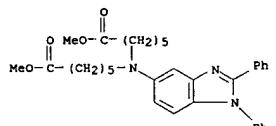
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



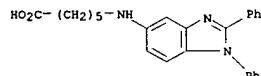
RN 350233-26-0 CAPLUS
 CN Hexanoic acid, 6-[(1,2-diphenyl-1H-benzimidazol-5-yl)amino]-, methyl ester (9CI) (CA INDEX NAME)



RN 350233-28-2 CAPLUS
 CN Hexanoic acid, 6,6'[-(1,2-diphenyl-1H-benzimidazol-5-yl)imino]bis-, dimethyl ester (9CI) (CA INDEX NAME)

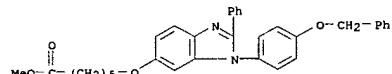


RN 350233-30-6 CAPLUS
 CN Hexanoic acid, 6-[(1,2-diphenyl-1H-benzimidazol-5-yl)amino]- (9CI) (CA INDEX NAME)

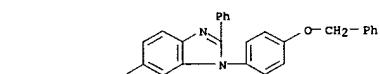


RN 350233-33-9 CAPLUS
 CN Hexanoic acid, 6-[(2-phenyl-1-[4-(phenylmethoxy)phenyl]-1H-benzimidazol-6-yl)oxy]-

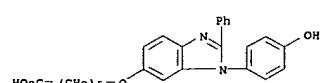
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



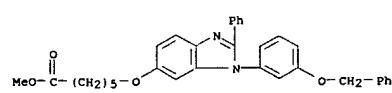
RN 350233-35-1 CAPLUS
 CN Hexanoic acid, 6-[(2-phenyl-1-[4-(phenylmethoxy)phenyl]-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



RN 350233-36-2 CAPLUS
 CN Hexanoic acid, 6-[(1-(4-hydroxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

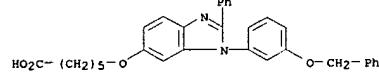


RN 350233-38-4 CAPLUS
 CN Hexanoic acid, 6-[(2-phenyl-1-[3-(phenylmethoxy)phenyl]-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

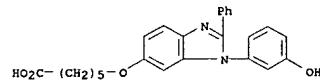


RN 350233-40-8 CAPLUS
 CN Hexanoic acid, 6-[(2-phenyl-1-[3-(phenylmethoxy)phenyl]-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

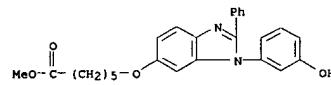
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



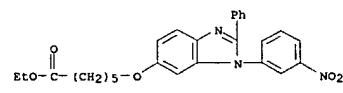
RN 350233-42-0 CAPLUS
 CN Hexanoic acid, 6-[(1-(3-hydroxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



RN 350233-44-2 CAPLUS
 CN Hexanoic acid, 6-[(1-(3-hydroxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



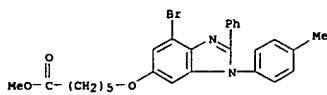
RN 350233-46-4 CAPLUS
 CN Hexanoic acid, 6-[(1-(3-nitrophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, ethyl ester (9CI) (CA INDEX NAME)



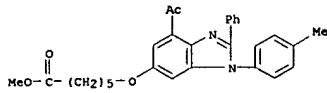
RN 350233-48-6 CAPLUS
 CN Hexanoic acid, 6-[(4-bromo-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

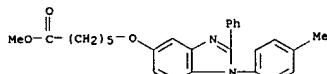
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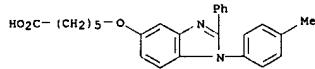
RN 350233-50-0 CAPLUS
 CN Hexanoic acid, 6-[(4-acetyl-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 350233-52-2 CAPLUS
 CN Hexanoic acid, 6-[(1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-5-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



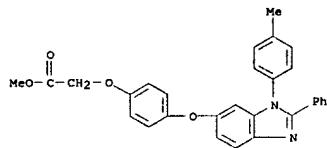
RN 350233-54-4 CAPLUS
 CN Hexanoic acid, 6-[(1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-5-yl)oxy]- (9CI) (CA INDEX NAME)



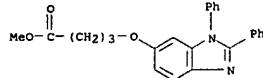
RN 350233-56-6 CAPLUS
 CN Hexanoic acid, 6-[(1-(4-methylthio)phenyl)-2-phenyl-1H-benzimidazol-5-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

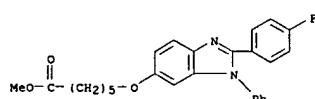
RN 350233-68-0 CAPLUS
 CN Acetic acid, 4-[(1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]phenoxy-, methyl ester (9CI) (CA INDEX NAME)



RN 350233-70-4 CAPLUS
 CN Butanoic acid, 4-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

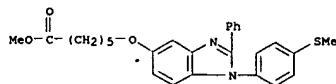


RN 350233-81-7 CAPLUS
 CN Hexanoic acid, 6-[(2-(4-fluorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

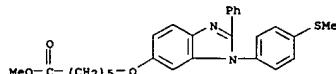


RN 350233-83-9 CAPLUS
 CN Hexanoic acid, 6-[(2-(4-methoxyphenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

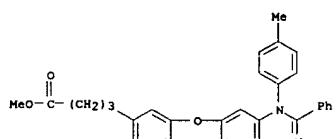
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



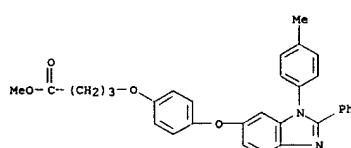
RN 350233-58-8 CAPLUS
 CN Hexanoic acid, 6-[(1-(4-(methylthio)phenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 350233-64-6 CAPLUS
 CN Benzenebutanoic acid, 3-[(1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



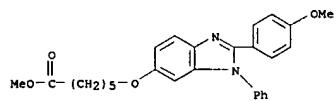
RN 350233-66-8 CAPLUS
 CN Butanoic acid, 4-[(1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]phenoxy-, methyl ester (9CI) (CA INDEX NAME)



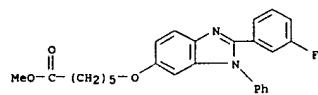
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 350233-68-0 CAPLUS
 CN Acetic acid, 4-[(1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]phenoxy-, methyl ester (9CI) (CA INDEX NAME)

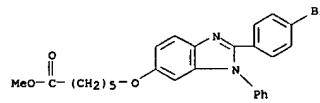
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



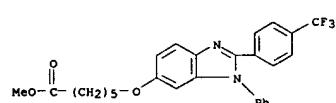
RN 350233-85-1 CAPLUS
 CN Hexanoic acid, 6-[(2-(3-fluorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 350233-87-3 CAPLUS
 CN Hexanoic acid, 6-[(2-(4-bromophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



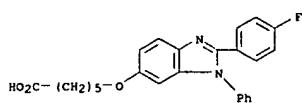
RN 350233-89-5 CAPLUS
 CN Hexanoic acid, 6-[(1-phenyl-2-[(trifluoromethyl)phenyl]-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 350233-90-8 CAPLUS
 CN Hexanoic acid, 6-[(2-(4-fluorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

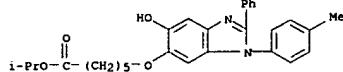
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RN 350233-94-2 CAPLUS

CN Hexanoic acid,

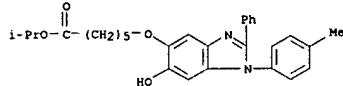
6-((5-hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-1-methylethyl ester (9CI) (CA INDEX NAME)



RN 350233-96-4 CAPLUS

CN Hexanoic acid,

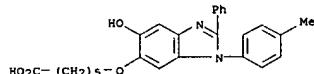
6-((6-hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-5-yl)oxy)-1-methylethyl ester (9CI) (CA INDEX NAME)



RN 350233-98-6 CAPLUS

CN Hexanoic acid,

6-((5-hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-1-methylethyl ester (9CI) (CA INDEX NAME)

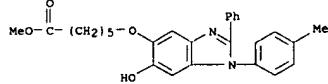


RN 350234-00-3 CAPLUS

CN Hexanoic acid,

6-((6-hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-5-yl)oxy)-1-methylethyl ester (9CI) (CA INDEX NAME)

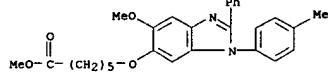
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 350234-07-0 CAPLUS

CN Hexanoic acid,

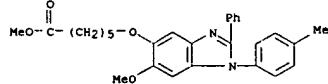
6-((5-methoxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-1-methylethyl ester (9CI) (CA INDEX NAME)



RN 350234-09-2 CAPLUS

CN Hexanoic acid,

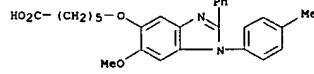
6-((6-methoxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-5-yl)oxy)-1-methylethyl ester (9CI) (CA INDEX NAME)



RN 350234-11-6 CAPLUS

CN Hexanoic acid,

6-((6-methoxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-5-yl)oxy)-1-methylethyl ester (9CI) (CA INDEX NAME)

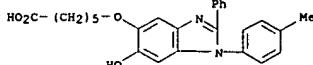


RN 350234-13-8 CAPLUS

CN Hexanoic acid,

6-((5-amino-1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-1-methylethyl ester (9CI) (CA INDEX NAME)

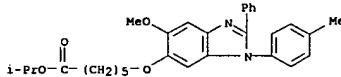
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 350234-10-4 CAPLUS

CN Hexanoic acid,

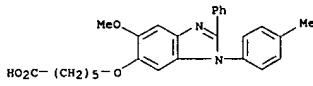
6-((5-methoxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-1-methylethyl ester (9CI) (CA INDEX NAME)



RN 350234-02-5 CAPLUS

CN Hexanoic acid,

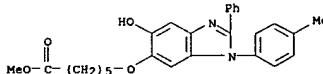
6-((6-methoxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-1-methylethyl ester (9CI) (CA INDEX NAME)



RN 350234-03-6 CAPLUS

CN Hexanoic acid,

6-((5-methoxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-1-methylethyl ester (9CI) (CA INDEX NAME)



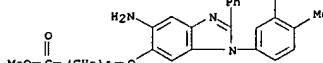
RN 350234-05-8 CAPLUS

CN Hexanoic acid,

6-((6-methoxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-5-yl)oxy)-1-methylethyl ester (9CI) (CA INDEX NAME)

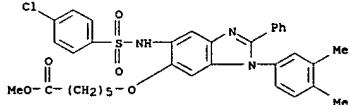
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



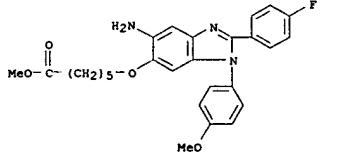
RN 350234-15-0 CAPLUS

CN Hexanoic acid, 6-((5-((4-chlorophenyl)sulfonyl)amino)-1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-1-methylethyl ester (9CI) (CA INDEX NAME)



RN 350234-16-1 CAPLUS

CN Hexanoic acid, 6-((5-amino-2-(4-fluorophenyl)-1-(4-methoxyphenyl)-1H-benzimidazol-6-yl)oxy)-1-methylethyl ester (9CI) (CA INDEX NAME)

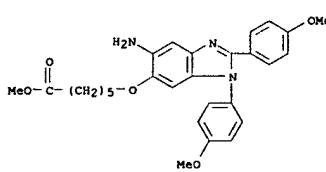


RN 350234-17-2 CAPLUS

CN Hexanoic acid, 6-((5-amino-1,2-bis(4-methoxyphenyl)-1H-benzimidazol-6-yl)oxy)-1-methylethyl ester (9CI) (CA INDEX NAME)

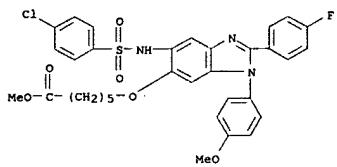
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)



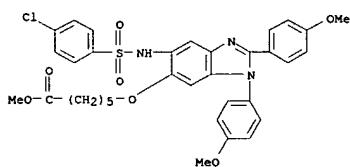
RN 350234-18-3 CAPLUS

CN Hexanoic acid, 6-[(5-[(4-chlorophenyl)sulfonyl]amino)-2-(4-fluorophenyl)-1-(4-methoxyphenyl)-1H-benzimidazol-6-yl]oxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 350234-19-4 CAPLUS

CN Hexanoic acid, 6-[(5-[(4-chlorophenyl)sulfonyl]amino)-1,2-bis(4-methoxyphenyl)-1H-benzimidazol-6-yl]oxy]-, methyl ester (9CI) (CA INDEX NAME)



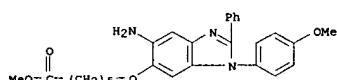
RN 350234-21-8 CAPLUS

CN Butanoic acid, 4-[(5-amino-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

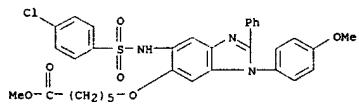
RN 350234-27-4 CAPLUS

CN Hexanoic acid, 6-[(5-amino-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



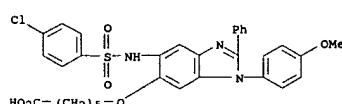
RN 350234-28-5 CAPLUS

CN Hexanoic acid, 6-[(5-[(4-chlorophenyl)sulfonyl]amino)-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]-, methyl ester (9CI) (CA INDEX NAME)



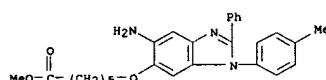
RN 350234-29-6 CAPLUS

CN Hexanoic acid, 6-[(5-[(4-chlorophenyl)sulfonyl]amino)-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]- (9CI) (CA INDEX NAME)



RN 350234-30-9 CAPLUS

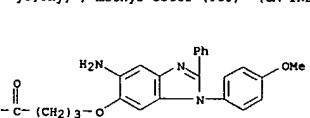
CN Hexanoic acid, 6-[(5-amino-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 350234-31-0 CAPLUS

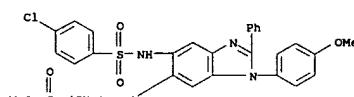
CN Hexanoic acid, 6-[(5-[(4-chlorophenyl)sulfonyl]amino)-1-(4-methylphenyl)-

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



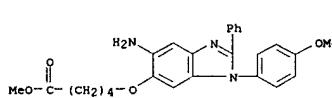
RN 350234-22-9 CAPLUS

CN Butanoic acid, 4-[(5-[(4-chlorophenyl)sulfonyl]amino)-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]-, methyl ester (9CI) (CA INDEX NAME)



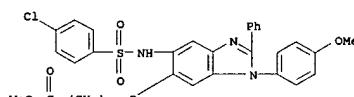
RN 350234-23-0 CAPLUS

CN Pentanoic acid, 5-[(5-amino-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 350234-25-2 CAPLUS

CN Pentanoic acid, 5-[(5-[(4-chlorophenyl)sulfonyl]amino)-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]-, methyl ester (9CI) (CA INDEX NAME)

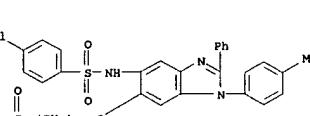


L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 350234-27-4 CAPLUS

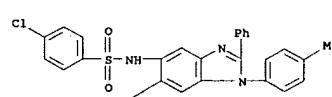
CN Hexanoic acid, 6-[(5-amino-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



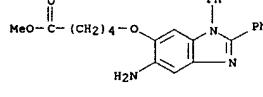
RN 350234-32-1 CAPLUS

CN Hexanoic acid, 6-[(5-[(4-chlorophenyl)sulfonyl]amino)-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]- (9CI) (CA INDEX NAME)



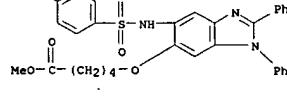
RN 350234-33-2 CAPLUS

CN Pentanoic acid, 5-[(5-amino-1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 350234-34-3 CAPLUS

CN Pentanoic acid, 5-[(5-[(4-chlorophenyl)sulfonyl]amino)-1,2-diphenyl-1H-benzimidazol-6-yl]oxy]-, methyl ester (9CI) (CA INDEX NAME)



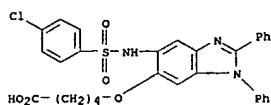
RN 350234-35-4 CAPLUS

CN Pentanoic acid, 5-[(5-[(4-chlorophenyl)sulfonyl]amino)-1,2-diphenyl-1H-benzimidazol-6-yl]oxy]- (9CI) (CA INDEX NAME)

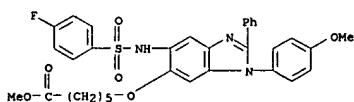
Searched by Jason M. Nolan

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

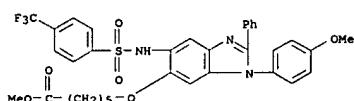
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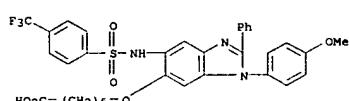
RN 350234-36-5 CAPLUS
 CN Hexanoic acid, 6-[(5-[(4-fluorophenyl)sulfonyl]amino)-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy-, methyl ester (9CI) (CA INDEX NAME)



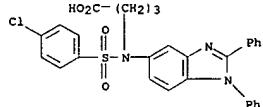
RN 350234-37-6 CAPLUS
 CN Hexanoic acid, 6-[(1-(4-methoxyphenyl)-2-phenyl-5-[(4-(trifluoromethyl)phenyl)sulfonyl]amino)-1H-benzimidazol-6-yl]oxy-, methyl ester (9CI) (CA INDEX NAME)



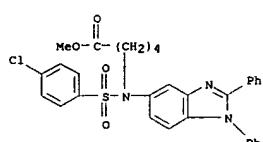
RN 350234-38-7 CAPLUS
 CN Hexanoic acid, 6-[(1-(4-methoxyphenyl)-2-phenyl-5-[(4-(trifluoromethyl)phenyl)sulfonyl]amino)-1H-benzimidazol-6-yl]oxy- (9CI) (CA INDEX NAME)



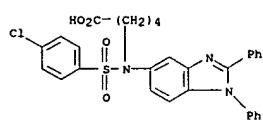
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 350234-43-4 CAPLUS
 CN Pentanoic acid, 5-[(4-chlorophenyl)sulfonyl](1,2-diphenyl-1H-benzimidazol-5-yl)amino-, methyl ester (9CI) (CA INDEX NAME)



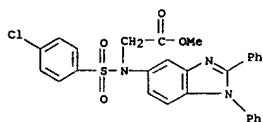
RN 350234-44-5 CAPLUS
 CN Pentanoic acid, 5-[(4-chlorophenyl)sulfonyl](1,2-diphenyl-1H-benzimidazol-5-yl)amino- (9CI) (CA INDEX NAME)



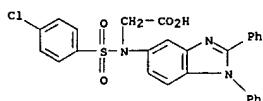
RN 350234-45-6 CAPLUS
 CN Hexanoic acid, 6-[(4-chlorophenyl)sulfonyl](1,2-diphenyl-1H-benzimidazol-5-yl)amino-, methyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

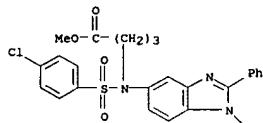
RN 350234-39-8 CAPLUS
 Glycine, N-[(4-chlorophenyl)sulfonyl]-N-(1,2-diphenyl-1H-benzimidazol-5-yl)-, methyl ester (9CI) (CA INDEX NAME)



RN 350234-40-1 CAPLUS
 Glycine, N-[(4-chlorophenyl)sulfonyl]-N-(1,2-diphenyl-1H-benzimidazol-5-yl)- (9CI) (CA INDEX NAME)



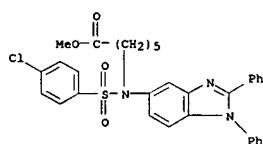
RN 350234-41-2 CAPLUS
 Butanoic acid, 4-[(4-chlorophenyl)sulfonyl](1,2-diphenyl-1H-benzimidazol-5-yl)amino-, methyl ester (9CI) (CA INDEX NAME)



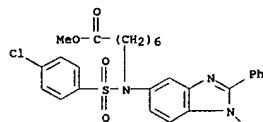
RN 350234-42-3 CAPLUS
 Butanoic acid, 4-[(4-chlorophenyl)sulfonyl](1,2-diphenyl-1H-benzimidazol-5-yl)amino- (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

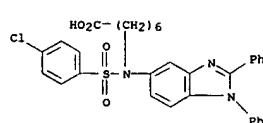
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 350234-46-7 CAPLUS
 Heptanoic acid, 7-[(4-chlorophenyl)sulfonyl](1,2-diphenyl-1H-benzimidazol-5-yl)amino-, methyl ester (9CI) (CA INDEX NAME)



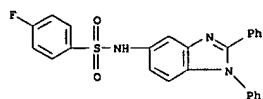
RN 350234-47-8 CAPLUS
 Heptanoic acid, 7-[(4-chlorophenyl)sulfonyl](1,2-diphenyl-1H-benzimidazol-5-yl)amino- (9CI) (CA INDEX NAME)



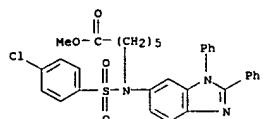
RN 350234-48-9 CAPLUS
 Benzenesulfonamide, N-(1,2-diphenyl-1H-benzimidazol-5-yl)-4-fluoro- (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

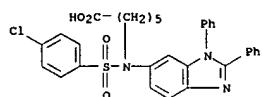
(Continued)



RN 350234-49-0 CAPLUS
 CN Hexanoic acid, 6-[(4-chlorophenyl)sulfonyl](1,2-diphenyl-1H-benzimidazol-6-yl)amino-, methyl ester (9CI) (CA INDEX NAME)



RN 350234-50-3 CAPLUS
 CN Hexanoic acid, 6-[(4-chlorophenyl)sulfonyl](1,2-diphenyl-1H-benzimidazol-6-yl)amino- (9CI) (CA INDEX NAME)

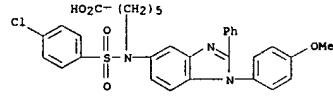


RN 350234-51-4 CAPLUS
 CN Hexanoic acid, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)[(4-(trifluoromethyl)phenyl)sulfonyl]amino-, methyl ester (9CI) (CA INDEX NAME)

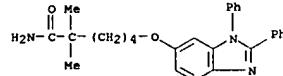


L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

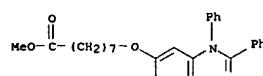
RN 350234-55-8 CAPLUS
 CN Hexanoic acid, 6-[(4-chlorophenyl)sulfonyl][1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-5-yl]amino- (9CI) (CA INDEX NAME)



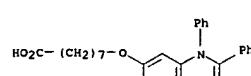
RN 350234-56-9 CAPLUS
 CN Hexanamide, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-2,2-dimethyl- (9CI) (CA INDEX NAME)



RN 350234-57-0 CAPLUS
 CN Octanoic acid, 8-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



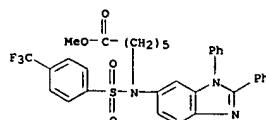
RN 350234-58-1 CAPLUS
 CN Octanoic acid, 8-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



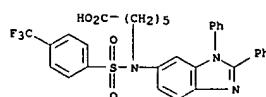
RN 350234-63-8 CAPLUS
 CN Hexanoic acid, 6-[(1-(3-fluorophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

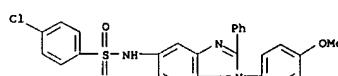
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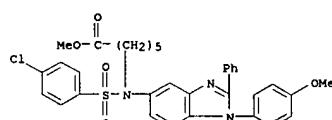
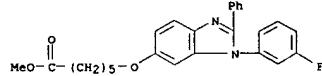
RN 350234-52-5 CAPLUS
 CN Hexanoic acid, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)[(trifluoromethyl)phenyl]sulfonyl]amino- (9CI) (CA INDEX NAME)



RN 350234-53-6 CAPLUS
 CN Benzenesulfonamide, 4-chloro-N-[1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)

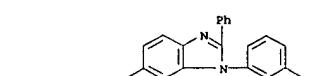


RN 350234-54-7 CAPLUS
 CN Hexanoic acid, 6-[(4-chlorophenyl)sulfonyl][1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-5-yl]amino-, methyl ester (9CI) (CA INDEX NAME)

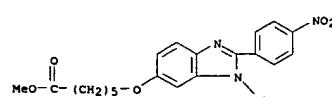
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 methyl ester (9CI) (CA INDEX NAME)

IT 350234-64-9P 350234-65-OP 350234-66-1P
 350234-68-3P 350234-69-4P 350234-70-7P
 350234-71-8P 350234-72-9P 350234-73-0P
 350234-74-1P 350234-75-2P 350234-76-3P
 350234-77-4P 350234-78-5P 350234-79-6P
 350234-80-7P 350234-81-0P 350234-82-1P
 350234-83-2P 350234-84-3P 350234-85-4P
 350234-86-5P 350234-87-6P 350234-88-7P
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 350234-95-6P 350234-96-7P 350234-97-8P
 350234-99-9P 350235-00-6P 350235-00-6P
 350235-01-7P 350235-02-8P 350235-03-9P
 350235-15-3P 350235-16-4P 350235-17-5P
 350235-18-6P 350238-47-0P 350238-49-1P
 RL: BAA (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of 1,2-diarylbenzimidazolealkanoates and analogs for treatment of disorders mediated by microglia activation)

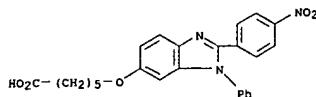
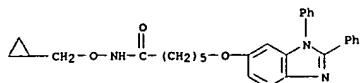
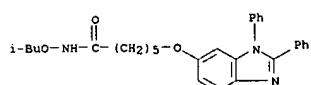
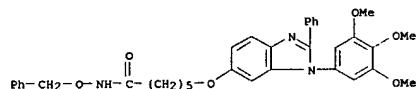
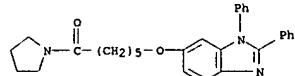
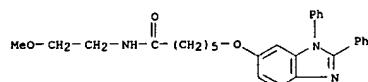
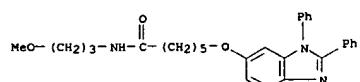
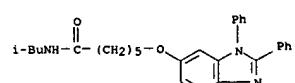
RN 350234-64-9 CAPLUS
 CN Hexanoic acid, 6-[(1-(3-fluorophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



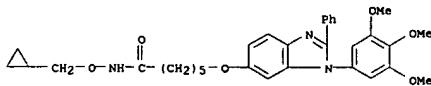
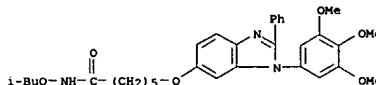
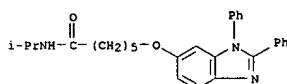
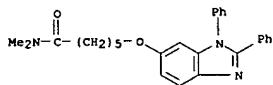
RN 350234-65-0 CAPLUS
 CN Hexanoic acid, 6-[(2-(4-nitrophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



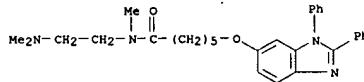
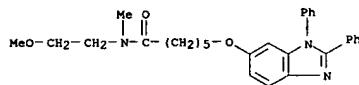
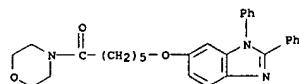
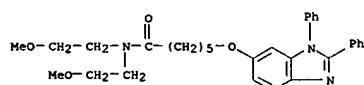
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 350234-66-1 CAPLUS
CN Hexanoic acid, 6-[(2-(4-nitrophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)RN 350234-68-3 CAPLUS
CN Hexanamide, N-(cyclopropylmethoxy)-6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)RN 350234-69-4 CAPLUS
CN Hexanamide, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-N-(2-methylpropoxy)- (9CI) (CA INDEX NAME)RN 350234-70-7 CAPLUS
CN Hexanamide, N-(phenylmethoxy)-6-[(2-phenyl-1-(3,4,5-trimethoxyphenyl)-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
RN 350234-75-2 CAPLUS
CN Pyridine, 1-[6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-1-oxohexyl]- (9CI) (CA INDEX NAME)RN 350234-76-3 CAPLUS
CN Hexanamide, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-N-(2-methoxyethyl)- (9CI) (CA INDEX NAME)RN 350234-77-4 CAPLUS
CN Hexanamide, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-N-(3-methoxypropyl)- (9CI) (CA INDEX NAME)RN 350234-78-5 CAPLUS
CN Hexanamide, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)RN 350234-79-6 CAPLUS
CN Hexanamide, N-[2-(dimethylamino)ethyl]-6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-N-methyl- (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

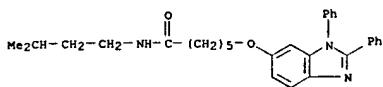
RN 350234-71-8 CAPLUS
CN Hexanamide, N-(cyclopropylmethoxy)-6-[(2-phenyl-1-(3,4,5-trimethoxyphenyl)-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)RN 350234-72-9 CAPLUS
CN Hexanamide, N-(2-methylpropoxy)-6-[(2-phenyl-1-(3,4,5-trimethoxyphenyl)-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)RN 350234-73-0 CAPLUS
CN Hexanamide, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)RN 350234-74-1 CAPLUS
CN Hexanamide, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-N,N-dimethyl- (9CI) (CA INDEX NAME)L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
RN 350234-75-2 CAPLUS
CN Pyridine, 1-[6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-1-oxohexyl]- (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

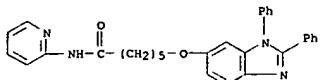
RN 350234-80-9 CAPLUS
CN Hexanamide, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-N-(2-methoxyethyl)-N-methyl- (9CI) (CA INDEX NAME)RN 350234-81-0 CAPLUS
CN Morpholine, 4-[6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-1-oxohexyl]- (9CI) (CA INDEX NAME)RN 350234-82-1 CAPLUS
CN Hexanamide, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-N,N-bis(2-methoxyethyl)- (9CI) (CA INDEX NAME)RN 350234-83-2 CAPLUS
CN Hexanamide, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-N-(3-methylbutyl)- (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

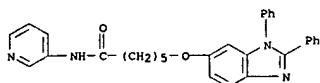
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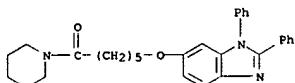
RN 350234-84-3 CAPLUS
 CN Hexanamide, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-N-2-pyridinyl-
 (9CI) (CA INDEX NAME)



RN 350234-85-4 CAPLUS
 CN Hexanamide, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-N-3-pyridinyl-
 (9CI) (CA INDEX NAME)



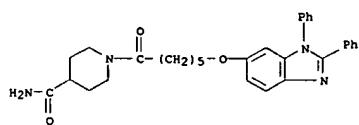
RN 350234-86-5 CAPLUS
 CN Piperidine, 1-[(6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-1-oxohexyl)-
 (9CI) (CA INDEX NAME)



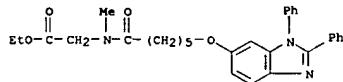
RN 350234-87-6 CAPLUS
 CN 4-Piperidinocarboxamide, 1-[(6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-1-
 oxohexyl)- (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

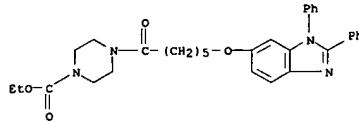
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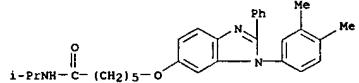
RN 350234-88-7 CAPLUS
 CN Glycine, N-(6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-1-oxohexyl)-N-
 methyl-, ethyl ester (9CI) (CA INDEX NAME)



RN 350234-89-8 CAPLUS
 CN 1-Piperazinecarboxylic acid,
 4-(6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-1-oxohexyl)-, ethyl ester (9CI) (CA INDEX NAME)

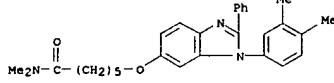


RN 350234-90-1 CAPLUS
 CN Hexanamide,
 6-[(1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-
 N-(1-methylethyl)- (9CI) (CA INDEX NAME)

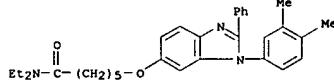


L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

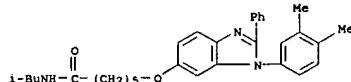
RN 350234-91-2 CAPLUS
 CN Hexanamide,
 6-[(1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-
 N,N-dimethyl- (9CI) (CA INDEX NAME)



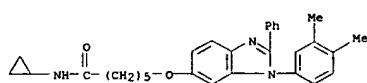
RN 350234-92-3 CAPLUS
 CN Hexanamide,
 6-[(1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-
 N,N-diethyl- (9CI) (CA INDEX NAME)



RN 350234-93-4 CAPLUS
 CN Hexanamide,
 6-[(1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-
 N-(2-methylpropyl)- (9CI) (CA INDEX NAME)

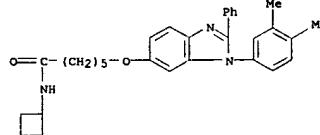


RN 350234-94-5 CAPLUS
 CN Hexanamide, N-cyclopropyl-6-[(1-(3,4-dimethylphenyl)-2-phenyl-1H-
 benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

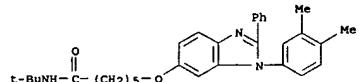


RN 350234-95-6 CAPLUS
 CN Hexanamide, N-cyclobutyl-6-[(1-(3,4-dimethylphenyl)-2-phenyl-1H-
 benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

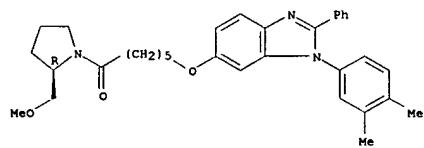


RN 350234-96-7 CAPLUS
 CN Hexanamide, N-(1,1-dimethylethyl)-6-[(1-(3,4-dimethylphenyl)-2-phenyl-1H-
 benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

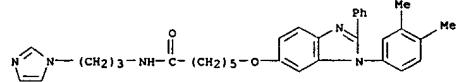


RN 350234-97-8 CAPLUS
 CN Pyrrolidine, 1-[(1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-
 yloxy)-1-oxohexyl]-2-(methoxymethyl)-, (2R)- (9CI) (CA INDEX NAME)

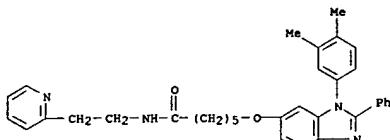
Absolute stereochemistry.



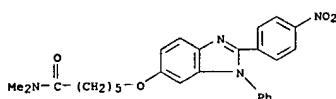
RN 350234-98-9 CAPLUS
 CN Hexanamide,
 6-[(1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-
 N-[3-(1H-imidazol-1-yl)propyl]- (9CI) (CA INDEX NAME)



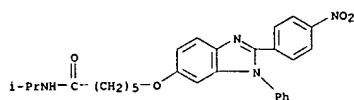
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 RN 350234-99-0 CAPLUS
 CN Hexanamide,
 6-[(1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-
 N-(2-(2-pyridinyl)ethyl)- (9CI) (CA INDEX NAME)



RN 350235-00-6 CAPLUS
 CN Hexanamide,
 N,N-dimethyl-6-[(2-(4-nitrophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

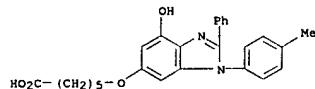


RN 350235-01-7 CAPLUS
 CN Hexanamide, N-(1-methylethyl)-6-[(2-(4-nitrophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

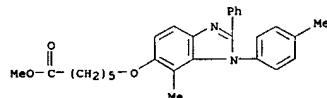


RN 350235-02-8 CAPLUS
 CN Hexanamide, N-(3-methylbutyl)-6-[(2-(4-nitrophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

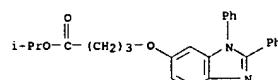
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



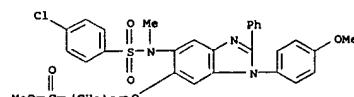
RN 350235-18-6 CAPLUS
 CN Hexanoic acid,
 6-[(7-methyl-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 350238-47-0 CAPLUS
 CN Butanoic acid, 4-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

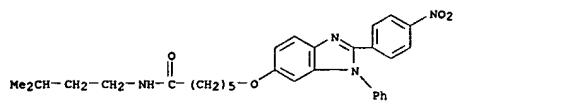


RN 350238-48-1 CAPLUS
 CN Hexanoic acid, 6-[(5-[(4-chlorophenyl)sulfonyl]methylamino)-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

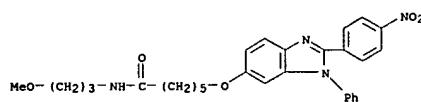


IT 117125-04-9 166396-01-2 166396-00-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of 1,2-diarylbenzimidazolealkanoates and analogs for
 treatment
 of disorders mediated by microglia activation)
 RN 117125-04-9 CAPLUS

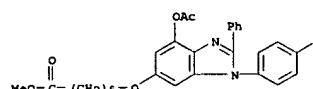
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



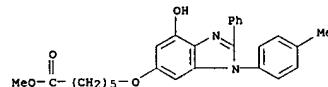
RN 350235-03-9 CAPLUS
 CN Hexanamide, N-(3-methoxypropyl)-6-[(2-(4-nitrophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



RN 350235-15-3 CAPLUS
 CN Hexanoic acid, 6-[(4-acetoxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

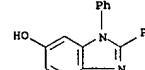


RN 350235-16-4 CAPLUS
 CN Hexanoic acid,
 6-[(4-hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

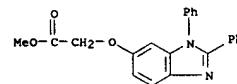


RN 350235-17-5 CAPLUS
 CN Hexanoic acid,
 6-[(4-hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

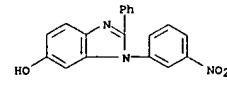
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 CN 1H-Benzimidazol-6-ol, 1,2-diphenyl- (9CI) (CA INDEX NAME)



RN 166396-81-2 CAPLUS
 CN Acetic acid, [(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

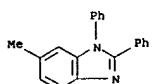


RN 166396-88-9 CAPLUS
 CN 1H-Benzimidazol-6-ol, 1-(3-nitrophenyl)-2-phenyl- (9CI) (CA INDEX NAME)

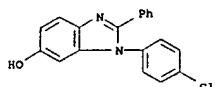


IT 06310-02-7P 117125-07-2P 117125-08-3P
 175714-02-0P 182060-18-0P 350235-19-7P
 350235-21-1P 350235-22-2P 350235-24-4P
 350235-25-5P 350235-27-7P 350235-28-0P
 350235-29-9P 350235-30-2P 350235-31-3P
 350235-32-4P 350235-35-7P 350235-36-0P
 350235-38-0P 350235-55-1P 350235-56-2P
 350235-59-5P 350235-60-0P 350235-65-3P
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 350235-69-7P 350235-70-0P 350235-71-1P
 350235-74-4P 350235-76-6P 350235-77-7P
 350235-79-9P 350235-80-2P 350235-81-3P
 350235-89-0P 350235-89-1P 350235-90-4P
 350235-91-5P 350235-93-7P 350235-94-0P
 350235-95-9P 350235-96-0P 350235-99-3P
 350236-00-9P 350236-01-0P 350236-02-1P
 350239-49-2P
 RL: RCT (Reactant); RPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of 1,2-diarylbenzimidazolealkanoates and analogs for
 treatment
 of disorders mediated by microglia activation)

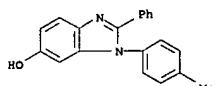
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 RN 86318-02-7 CAPLUS
 CN 1H-Benzimidazole, 6-methyl-1,2-diphenyl- (9CI) (CA INDEX NAME)



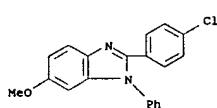
RN 117125-07-2 CAPLUS
 CN 1H-Benzimidazol-6-ol, 1-(4-chlorophenyl)-2-phenyl- (9CI) (CA INDEX NAME)



RN 117125-08-3 CAPLUS
 CN 1H-Benzimidazol-6-ol, 1-(4-methylphenyl)-2-phenyl- (9CI) (CA INDEX NAME)

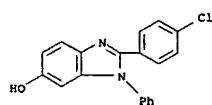


RN 175714-02-0 CAPLUS
 CN 1H-Benzimidazole, 2-(4-chlorophenyl)-6-methoxy-1-phenyl- (9CI) (CA INDEX NAME)

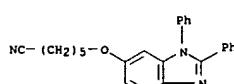


RN 182060-18-0 CAPLUS
 CN 1H-Benzimidazol-6-ol, 2-(4-chlorophenyl)-1-phenyl- (9CI) (CA INDEX NAME)

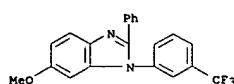
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



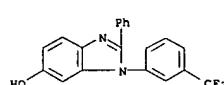
RN 350235-19-7 CAPLUS
 CN Hexanenitrile, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



RN 350235-21-1 CAPLUS
 CN 1H-Benzimidazole, 6-methoxy-2-phenyl-1-(3-(trifluoromethyl)phenyl)- (9CI) (CA INDEX NAME)

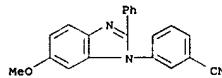


RN 350235-22-2 CAPLUS
 CN 1H-Benzimidazol-6-ol, 2-phenyl-1-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

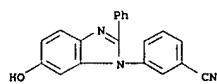


RN 350235-24-4 CAPLUS
 CN Benzonitrile, 3-(6-methoxy-2-phenyl-1H-benzimidazol-1-yl)- (9CI) (CA INDEX NAME)

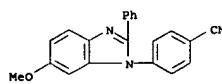
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



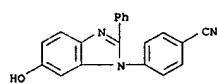
RN 350235-25-5 CAPLUS
 CN Benzonitrile, 3-(6-hydroxy-2-phenyl-1H-benzimidazol-1-yl)- (9CI) (CA INDEX NAME)



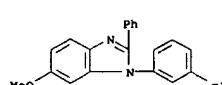
RN 350235-27-7 CAPLUS
 CN Benzonitrile, 4-(6-methoxy-2-phenyl-1H-benzimidazol-1-yl)- (9CI) (CA INDEX NAME)



RN 350235-28-8 CAPLUS
 CN Benzonitrile, 4-(6-hydroxy-2-phenyl-1H-benzimidazol-1-yl)- (9CI) (CA INDEX NAME)

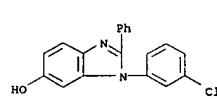


RN 350235-29-9 CAPLUS
 CN 1H-Benzimidazole, 1-(3-chlorophenyl)-6-methoxy-2-phenyl- (9CI) (CA INDEX NAME)

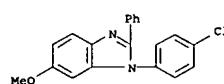


RN 350235-30-2 CAPLUS
 CN 1H-Benzimidazol-6-ol, 1-(3-chlorophenyl)-2-phenyl- (9CI) (CA INDEX NAME)

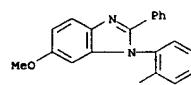
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



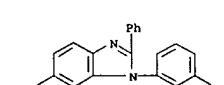
RN 350235-31-3 CAPLUS
 CN 1H-Benzimidazole, 1-(4-chlorophenyl)-6-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



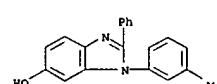
RN 350235-32-4 CAPLUS
 CN 1H-Benzimidazole, 6-methoxy-1-(2-methylphenyl)-2-phenyl- (9CI) (CA INDEX NAME)



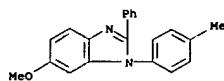
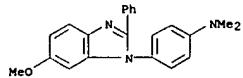
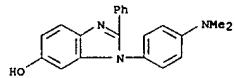
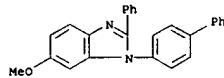
RN 350235-35-7 CAPLUS
 CN 1H-Benzimidazole, 6-methoxy-1-(3-methylphenyl)-2-phenyl- (9CI) (CA INDEX NAME)



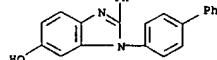
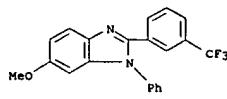
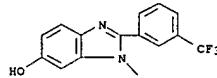
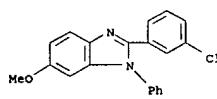
RN 350235-36-8 CAPLUS
 CN 1H-Benzimidazol-6-ol, 1-(3-methylphenyl)-2-phenyl- (9CI) (CA INDEX NAME)



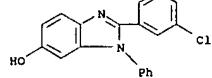
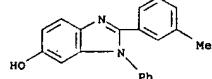
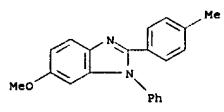
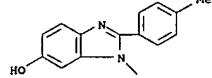
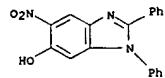
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 350235-38-0 CAPLUS
CN 1H-Benzimidazole, 6-methoxy-1-(4-methylphenyl)-2-phenyl- (9CI) (CA INDEX NAME)RN 350235-55-1 CAPLUS
CN Benzenamine, 4-(6-methoxy-2-phenyl-1H-benzimidazol-1-yl)-N,N-dimethyl- (9CI) (CA INDEX NAME)RN 350235-56-2 CAPLUS
CN 1H-Benzimidazol-6-ol, 1-[4-(dimethylamino)phenyl]-2-phenyl- (9CI) (CA INDEX NAME)RN 350235-59-5 CAPLUS
CN 1H-Benzimidazole, 1-[1,1'-biphenyl]-4-yl-6-methoxy-2-phenyl- (9CI) (CA INDEX NAME)RN 350235-60-8 CAPLUS
CN 1H-Benzimidazol-6-ol, 1-(1,1'-biphenyl)-4-yl-2-phenyl- (9CI) (CA INDEX NAME)

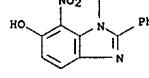
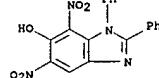
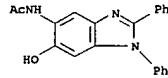
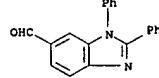
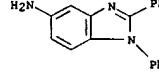
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 350235-65-3 CAPLUS
CN 1H-Benzimidazole, 6-methoxy-1-phenyl-2-(3-(trifluoromethyl)phenyl)- (9CI) (CA INDEX NAME)RN 350235-66-4 CAPLUS
CN 1H-Benzimidazol-6-ol, 1-phenyl-2-(3-(trifluoromethyl)phenyl)- (9CI) (CA INDEX NAME)RN 350235-67-5 CAPLUS
CN 1H-Benzimidazole, 2-(3-chlorophenyl)-6-methoxy-1-phenyl- (9CI) (CA INDEX NAME)RN 350235-68-6 CAPLUS
CN 1H-Benzimidazol-6-ol, 2-(3-chlorophenyl)-1-phenyl- (9CI) (CA INDEX NAME)

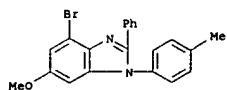
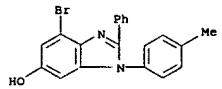
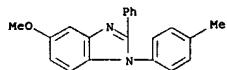
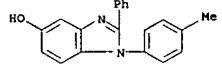
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 350235-69-7 CAPLUS
CN 1H-Benzimidazol-6-ol, 2-(3-methylphenyl)-1-phenyl- (9CI) (CA INDEX NAME)RN 350235-70-0 CAPLUS
CN 1H-Benzimidazole, 6-methoxy-2-(4-methylphenyl)-1-phenyl- (9CI) (CA INDEX NAME)RN 350235-71-1 CAPLUS
CN 1H-Benzimidazol-6-ol, 2-(4-methylphenyl)-1-phenyl- (9CI) (CA INDEX NAME)RN 350235-74-4 CAPLUS
CN 1H-Benzimidazol-6-ol, 5-nitro-1,2-diphenyl- (9CI) (CA INDEX NAME)

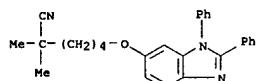
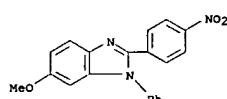
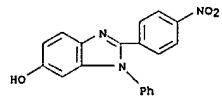
L3 ANSWER 23 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 350235-76-6 CAPLUS
CN 1H-Benzimidazol-6-ol, 7-nitro-1,2-diphenyl- (9CI) (CA INDEX NAME)RN 350235-77-7 CAPLUS
CN 1H-Benzimidazol-6-ol, 5,7-dinitro-1,2-diphenyl- (9CI) (CA INDEX NAME)RN 350235-79-9 CAPLUS
CN Acetamide, N-(6-hydroxy-1,2-diphenyl-1H-benzimidazol-5-yl)- (9CI) (CA INDEX NAME)RN 350235-80-2 CAPLUS
CN 1H-Benzimidazole-6-carboxaldehyde, 1,2-diphenyl- (9CI) (CA INDEX NAME)RN 350235-81-3 CAPLUS
CN 1H-Benzimidazol-5-amine, 1,2-diphenyl- (9CI) (CA INDEX NAME)

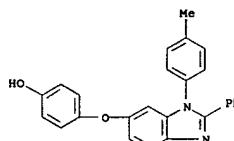
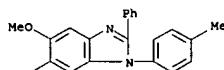
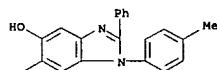
L3 ANSWER 23 OF 81 CAPIUS COPYRIGHT 2006 ACS on STN (Continued)

RN 350235-88-0 CAPIUS
CN 1H-Benzimidazole, 4-bromo-6-methoxy-1-(4-methylphenyl)-2-phenyl- (9CI)
(CA INDEX NAME)RN 350235-89-1 CAPIUS
CN 1H-Benzimidazol-6-ol, 4-bromo-1-(4-methylphenyl)-2-phenyl- (9CI) (CA INDEX NAME)RN 350235-90-4 CAPIUS
CN 1H-Benzimidazole, 5-methoxy-1-(4-methylphenyl)-2-phenyl- (9CI) (CA INDEX NAME)RN 350235-91-5 CAPIUS
CN 1H-Benzimidazol-5-ol, 1-(4-methylphenyl)-2-phenyl- (9CI) (CA INDEX NAME)RN 350235-93-7 CAPIUS
CN 1H-Benzimidazole, 6-(4-methoxyphenoxy)-1-(4-methylphenyl)-2-phenyl- (9CI)
(CA INDEX NAME)

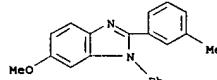
L3 ANSWER 23 OF 81 CAPIUS COPYRIGHT 2006 ACS on STN (Continued)

RN 350236-00-9 CAPIUS
CN Hexanenitrile, 6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]-2,2-dimethyl- (9CI) (CA INDEX NAME)RN 350236-01-0 CAPIUS
CN 1H-Benzimidazole, 6-methoxy-2-(4-nitrophenyl)-1-phenyl- (9CI) (CA INDEX NAME)RN 350236-02-1 CAPIUS
CN 1H-Benzimidazol-6-ol, 2-(4-nitrophenyl)-1-phenyl- (9CI) (CA INDEX NAME)RN 350238-49-2 CAPIUS
CN 1H-Benzimidazole, 6-methoxy-2-(3-methylphenyl)-1-phenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPIUS COPYRIGHT 2006 ACS on STN (Continued)

RN 350235-94-8 CAPIUS
CN Phenol, 4-[(1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI)
(CA INDEX NAME)RN 350235-95-9 CAPIUS
CN 1H-Benzimidazole, 5,6-dimethoxy-1-(4-methylphenyl)-2-phenyl- (9CI) (CA INDEX NAME)RN 350235-96-0 CAPIUS
CN 1H-Benzimidazole-5,6-diol, 1-(4-methylphenyl)-2-phenyl- (9CI) (CA INDEX NAME)RN 350235-99-3 CAPIUS
CN 1H-Benzimidazol-5-amine, 1-(4-methoxyphenyl)-2-phenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 23 OF 81 CAPIUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 9 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L3 ANSWER 24 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2001:254870 CAPLUS
 DOCUMENT NUMBER: 134:287964
 TITLE: Organic compound for organic electroluminescence
 member
 INVENTOR(S): Hosokawa, Chihiro; Ikeda, Shuji
 PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001097949	A2	20010410	JP 1999-277956	19990930
			JP 1999-277956	19990930

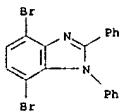
PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 134:287964
 AB The title organic compound is represented by
 $[Ar4Ar5C=Cr1]s[Ar2]m[Ar1]k[Ar3]n$
 $w[R2c=Cr6Ar7]t$ (Ar1 = divalent organic group; Ar2,3 = C6-30 arylene,
 etc.).

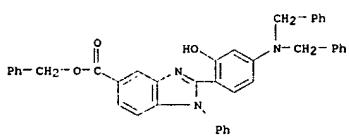
Ar4-7 = C6-20 aryl, etc.; R1,2 = H, Cl-6 alkyl, etc.; m, n, s, and t = 0,
 1, 2). When the organic compound is used as a recombination site-forming
 substance and a light-emitting material, the electroluminescence member
 gives high efficiency and long lifetime.

IT 333432-31-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (organic compound for organic electroluminescence member)

RN 333432-31-8 CAPLUS
 CN 1H-Benzimidazole, 4,7-dibromo-1,2-diphenyl- (9CI) (CA INDEX NAME)



L3 ANSWER 25 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L3 ANSWER 25 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2001:111259 CAPLUS
 DOCUMENT NUMBER: 134:155302
 TITLE: Rewritable blue-laser sensitive optical disk
 INVENTOR(S): Ogiso, Akira; Tsukahara, Hiroshi; Nishimoto, Taizo;
 Misawa, Tatsuyoshi; Takuma, Keisuke
 PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan; Yamamoto Chemicals Inc.
 SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001039034	A2	20010213	JP 1999-220067	19990803
			JP 1999-220067	19990803

OTHER SOURCE(S): MARPAT 134:155302
 GI

AB The title optical disk has a recording layer and a reflective layer on a
 substrate, wherein the recording layer contains compound I (X = halo,
 OH, cyano, alkyl, aralkyl, aryl, etc.; L1-4 = H, halo, OH, cyano, alkyl,
 aralkyl, etc.; Z = O, S). The optical disk shows the good writing/
 reading characteristics using a 400-500 nm laser beam.

IT 324521-33-7
 RL: TEM (Technical or engineered material use); USES (Uses)
 (recording layer of rewritable blue-laser sensitive optical disk)

RN 324521-33-7 CAPLUS
 CN 1H-Benzimidazole-5-carboxylic acid, 2-[4-(bis(phenylmethyl)amino)-2-
 hydroxyphenyl]-1-phenyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 26 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2000:297304 CAPLUS
 DOCUMENT NUMBER: 133:202600
 TITLE: A quantitative structure-activity relationship
 analysis of some substituted oxazolopyridines and
 benzimidazoles with antiinflammatory activity

AUTHOR(S): Chakravarti, S. K.; Chatterjee, K.
 CORPORATE SOURCE: Department of Pharmacy, Shri Govindram Seksaria
 Institute of Technology and Science, Indore, 452003,
 India

SOURCE: Indian Journal of Pharmaceutical Sciences (1999),
 61(4), 206-212

PUBLISHER: Indian Pharmaceutical Association

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The lowest energy conformations of some antiinflammatory 2-(substituted
 phenyl)oxazolopyridines, 2-(substituted pyridinyl) benzimidazoles and
 1H-benzimidazoles were calculated and quant. structure-activity
 relationship

anal. was then performed on each category of compds. using thermodyn.,
 electronic and spatial descriptors. The resulting QSAR equations were
 validated by leave-one-out cross validation method. Electronic parameter
 (dipole moment) and spatial parameters (mol. volume and principal moment
 of

inertia) were found to have significant correlation with antiinflammatory
 activity.

IT 175714-03-1 289893-74-9 289893-75-0

289893-76-1

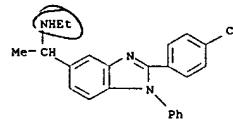
RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study);

USES (Uses)

(QSAR of substituted oxazolopyridines and benzimidazoles with
 antiinflammatory activity)

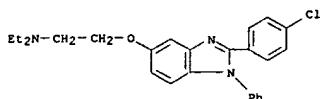
RN 175714-03-1 CAPLUS

CN 1H-Benzimidazole-5-methanamine, 2-(4-chlorophenyl)-N-ethyl- α -methyl-
 1-phenyl- (9CI) (CA INDEX NAME)

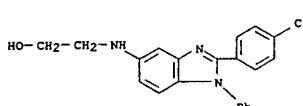


RN 289893-74-9 CAPLUS
 CN Ethanamine,
 2-[(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-5-yl)oxy]-N,N-
 diethyl- (9CI) (CA INDEX NAME)

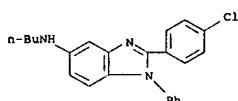
L3 ANSWER 26 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 289893-75-0 CAPLUS
 CN Ethanol, 2-[(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-5-yl)amino]- (9CI) (CA INDEX NAME)



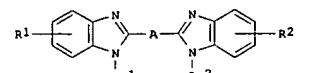
RN 289893-76-1 CAPLUS
 CN 1H-Benzimidazol-5-amine, N-butyl-2-(4-chlorophenyl)-1-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

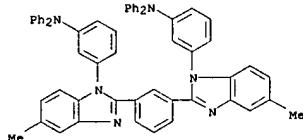
L3 ANSWER 27 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2000:215999 CAPLUS
 DOCUMENT NUMBER: 132:259111
 TITLE: Benzimidazoles, their preparation, hole-transporting materials, electroluminescent devices, and electrophotographic photoreceptors thereof
 INVENTOR(S): Ueda, Hideaki; Fujino, Yasumitsu; Furukawa, Keiichi
 PATENT ASSIGNEE(S): Minolta Camera Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000095766	A2	20000404	JP 1998-269595	19980924
PRIORITY APPLN. INFO.:		JP 1998-269595		
OTHER SOURCE(S):		MARPAT 132:258111 GI		

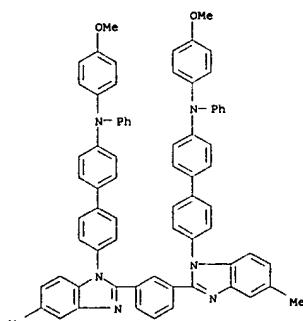


AB The benzimidazole compds. are shown as I (A = ethylene, heterocyclic ring which may be linked; Ar1, Ar2 = aryl, heterocyclic ring; R1, R2 = H, alkyl, alkoxy, halo) and are prepared by reacting benzimidazoles II (A, R1, R2 = same as above) with halogens Ar1X and Ar2X (Ar1, Ar2 = same as above; X = halo). The hole-transporting materials for the electrophotog. photoreceptors comprise I and show excellent durability. The electroluminescent devices have 21 layer containing I.
 IT 262434-53-7 262434-59-3 262434-64-0
 RL: TEC (Technical or engineered material use); USES (Uses) (preparation of benzimidazole derivs. for hole-transporting materials and electroluminescent devices and electrophotog. photoreceptors thereof)
 RN 262434-53-7 CAPLUS
 CN Benzenamine, 3,3'-(1,3-phenylenebis(5-methyl-1H-benzimidazole-2,1-diyl))bis[N,N-diphenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 27 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

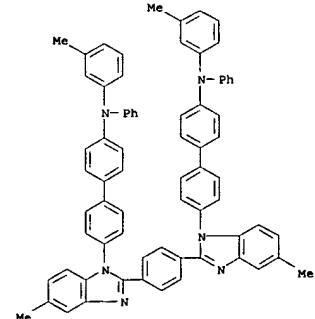


RN 262434-59-3 CAPLUS
 CN [1,1'-Biphenyl]-4-amine, 4',4'''-[1,3-phenylenebis(5-methyl-1H-benzimidazole-2,1-diyl)]bis[N-(4-methoxyphenyl)-N-phenyl- (9CI) (CA INDEX NAME)



RN 262434-64-0 CAPLUS
 CN {1,1'-Biphenyl}-4-amine, 4',4'''-[1,4-phenylenebis(5-methyl-1H-benzimidazole-2,1-diyl)]bis[N-(3-methylphenyl)-N-phenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 27 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

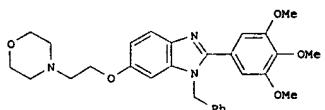
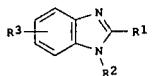


L3 ANSWER 28 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1997-623154 CAPLUS
 DOCUMENT NUMBER: 127:293221

TITLE: Methods of treating or preventing interstitial cystitis using substituted benzimidazoles
 INVENTOR(S): Iyengar, Smriti; Muhlhauer, Mark A.; Thor, Karl B.
 PATENT ASSIGNEE(S): E.I. du Pont de Nemours & Company, USA; Iyengar, Smriti; Muhlhauer, Mark A.; Thor, Karl B.
 SOURCE: PCT Int. Appl., 121 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

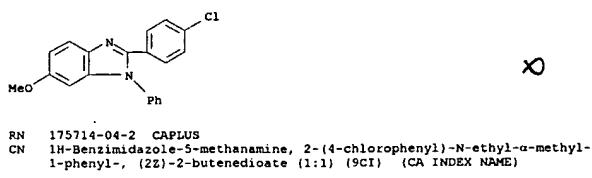
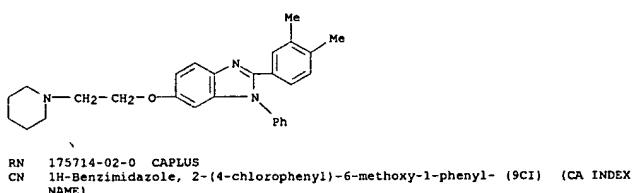
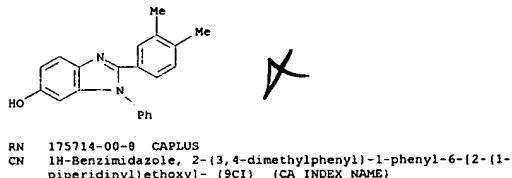
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 973873	A1	19970918	WO 1997-053895	19970307
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, DE, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LS, LV, MD, MG, MM, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, MR, NE, SN, TD, TG				
CA 2248013	AA	19970918	CA 1997-2248013	19970307
AU 972078	A1	19971001	AU 1997-22078	19970307
JP 2000056529	T2	20000530	JP 1997-532805	19970307
US 6025379	A	20000215	US 1998-125956	19980825
PRIORITY APPLN. INFO.:			US 1996-13129P	P 19960311
			WO 1997-053895	W 19970307

OTHER SOURCE(S): MARPAT 127:293221
 GI

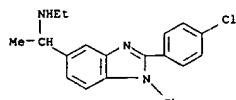


AB The invention provides methods for the treatment or prevention of interstitial cystitis or urethral syndrome using substituted

L3 ANSWER 28 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



CM 1
 CRN 175714-03-1
 CMF C23 H22 Cl N3



Searched by Jason M. Nolan

L3 ANSWER 28 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 benzimidazoles I [R1, R2 = H, alkyl, alkoxy, (un)substituted Ph, cycloalkyl, naphthyl, heterocyclyl, phenylalkyl, heterocyclylalkoxy, etc.]

R3 = H, NO₂, CF₃, halo, alkenoyl, amino, alkyl, alkoxy, alkylthio, cycloalkyl, (un)substituted heterocyclyl, amino, aminoalkoxy, aminoalkyl, heterocyclylalkyl, heterocyclylalkoxy, etc. only 1 or R1 and R2 may be

H] or their pharmaceutically acceptable salts or solvates. Approx. 170 synthetic examples of I are given, with the products serving as target compds. and/or intermediates. Use of specific preferred compds. contg. cyclic or acyclic amine sidechains is also claimed. For instance, etherification of 1-benzenyl-2-(3,4,5-trimethoxyphenyl)-6-hydroxybenzimidazole-HCl (prepn. given) with 4-(2-chloroethyl)morpholine-HCl in acetone in the presence of K₂CO₃ gave preferred title compd. II. Methods for the bioassay and clin. evaluation of I are described (no data).

IT 175714-99-2P, 1-Phenyl-2-(3,4-dimethylphenyl)-6-hydroxybenzimidazole 175714-00-8P, 1-Phenyl-2-(3,4-dimethylphenyl)-6-(2-(piperidin-1-yl)ethoxy)benzimidazole 175714-02-0P, 1-Phenyl-2-(4-chlorophenyl)-6-hydroxybenzimidazole 175714-04-2P, 1-Phenyl-2-(4-chlorophenyl)-6-hydroxybenzimidazole 175714-05-3P, (ethoxyethoxyethyl)benzimidazole maleate 175714-07-5P, 1-Phenyl-2-(4-chlorophenyl)-6-hydroxybenzimidazole 175714-08-6P, 1-Phenyl-2-(4-chlorophenyl)-6-(2-hydroxyethyl)amino)benzimidazole 175714-10-0P, 1-Phenyl-2-(4-chlorophenyl)-6-(1-aminoethyl)benzimidazole maleate 175714-11-1P, 1-Phenyl-2-(4-chlorophenyl)-6-(N-(1-propylcarbonyl)-N-butylamino)benzimidazole 175714-12-2P, 1-Phenyl-2-(4-chlorophenyl)-5-acetylbenzimidazole 175714-13-3P, 1-Phenyl-2-(4-chlorophenyl)-5-hydroxyethyl)benzimidazole 175714-14-4P, 1-Phenyl-2-(4-chlorophenyl)-6-(2-(piperidin-1-yl)ethoxy)benzimidazole 175714-15-5P, 1-Phenyl-2-(4-chlorophenyl)-6-(3-(N,N-dimethylamino)propoxy)benzimidazole 175714-16-6P, 1-Phenyl-2-(4-hydroxyphenyl)-6-hydroxybenzimidazole hydrochloride

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses); (product and/or intermediate; preparation of benzimidazole derivs. for treatment of interstitial cystitis)

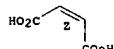
RN 175714-99-2 CAPLUS
 CN 1H-Benzimidazol-6-ol, 2-(3,4-dimethylphenyl)-1-phenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 28 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

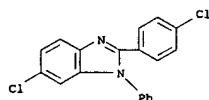
CM 2

CRN 110-16-7
 CMF C4 H4 O4

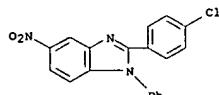
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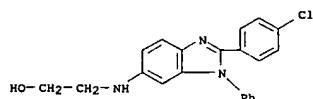
RN 175714-05-3 CAPLUS
 CN 1H-Benzimidazole, 6-chloro-2-(4-chlorophenyl)-1-phenyl- (9CI) (CA INDEX NAME)



RN 175714-07-5 CAPLUS
 CN 1H-Benzimidazole, 2-(4-chlorophenyl)-5-nitro-1-phenyl- (9CI) (CA INDEX NAME)

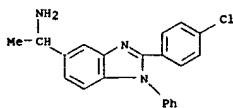


RN 175714-08-6 CAPLUS
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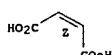
RN 175714-10-0 CAPLUS
 CN 1H-Benzimidazole-5-methanamine, 2-(4-chlorophenyl)- α -methyl-1-phenyl-

L3 ANSWER 28 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)
CM 1
CRN 175714-09-7
CMF C21 H18 Cl N3

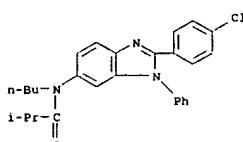


CM 2
CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.



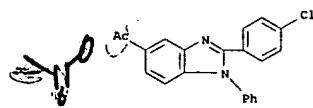
RN 175714-11-1 CAPLUS
CN Propanamide,
N-butyl-N-(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)-
2-methyl- (9CI) (CA INDEX NAME)



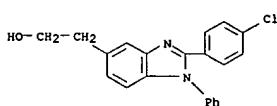
RN 175714-12-2 CAPLUS
CN Ethanone, 1-(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-5-yl)- (9CI)
(CA INDEX NAME)

(Continued)

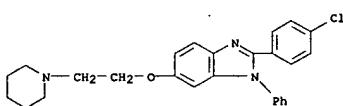
L3 ANSWER 28 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



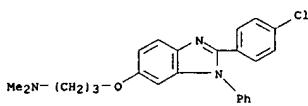
RN 175714-13-3 CAPLUS
CN 1H-Benzimidazole-5-ethanol, 2-(4-chlorophenyl)-1-phenyl- (9CI) (CA INDEX NAME)



RN 175714-14-4 CAPLUS
CN 1H-Benzimidazole,
2-(4-chlorophenyl)-1-phenyl-6-[2-(1-piperidinyl)ethoxy]-
(9CI) (CA INDEX NAME)

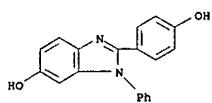


RN 175714-15-5 CAPLUS
CN 1-Propanamine, 3-[(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]-
N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 175714-16-6 CAPLUS
CN 1H-Benzimidazol-6-ol, 2-(4-hydroxyphenyl)-1-phenyl-, monohydrochloride
(9CI) (CA INDEX NAME)

L3 ANSWER 28 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

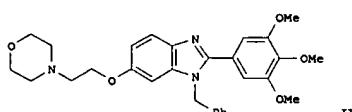
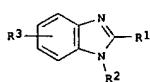


● HCl

L3 ANSWER 29 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997-594631 CAPLUS
DOCUMENT NUMBER: 127-262677
TITLE: Methods of treating or preventing sleep apnea using
di- and triasubstituted benzimidazoles
INVENTOR(S): Gitter, Bruce D.; Iyengar, Smriti
PATENT ASSIGNEE(S): Eli Lilly and Co., USA; Gitter, Bruce D.; Iyengar, Smriti
SOURCE: PCT Int. Appl., 117 pp.
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
WO 9731635	A1	19970904	WO 1997-US3113	19970226	
W: NL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, DE, DK, EE, ES, FI, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW, SE, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BE, BJ, CF, CG, CI, CM, GA, GN, HL, MR, NE, SN, TD, TG	AU 9721390	A1	19970916	AU 1997-21390	19970226
AU 9721390	A1	19970916	AU 1997-21390	19970226	
US 6030992	A	20000229	US 1998-142026	19980827	
PRIORITY APPLN. INFO.:			US 1996-12665P	P 19960301	
			WO 1997-US3113	W 19970226	

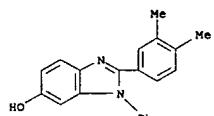
OTHER SOURCE(S): MARPAT 127:262677
GI



AB This invention provides methods for the treatment or prevention of sleep apnea (no data) using substituted benzimidazoles I (R1, R2 = H, alkyl, alkoxy, (un)substituted heterocyclic, phenylalkoxy, phenylalkylenyl, heterocyclylalkoxy, etc.; R3 = H, NO2, alkanoyl, alkyl, alkoxy, halo,

L3 ANSWER 29 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 (un)substituted amino, heterocyclic, heterocyclicalkoxy, hydroxylalkyl, etc.; provided that both of R1 and R2 cannot be H and their pharmaceutically acceptable salts or solvates. Examples include 174 syntheses of I, including both the preferred amine-contg target compds., and other compds. I serving primarily as intermediates. Eleven pharmaceutical formulations are also given. For instance, Eleven intermediate compd. I, HCl [R1 = 3,4,5-trimethoxyphenyl; R2 = CH2Ph; R3 = 6-OH] (prepd. in 3 steps from 4-amino-3-nitrophenol) was etherified with 4-(2-chloroethyl)morpholine-HCl using K2CO3 in acetone to give a preferred title compd., II.

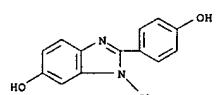
IT 175713-99-2P
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (drug and/or intermediate; preparation of benzimidazoles for treatment of prevention of sleep apnea)
 RN 175713-99-2 CAPLUS
 CN 1H-Benzimidazol-6-ol, 2-(3,4-dimethylphenyl)-1-phenyl- (9CI) (CA INDEX NAME)



IT 175714-02-0P 175714-05-3P 175714-07-5P
 175714-12-2P 175714-13-3P 175714-16-6P
 196105-50-7P 196105-51-6P 196105-52-9P
 196105-53-0P
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (drug and/or intermediate; preparation of benzimidazoles for treatment of prevention of sleep apnea)
 RN 175714-02-0 CAPLUS
 CN 1H-Benzimidazole, 2-(4-chlorophenyl)-6-methoxy-1-phenyl- (9CI) (CA INDEX NAME)

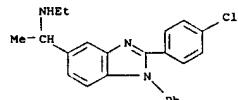
L3 ANSWER 29 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 175714-16-6 CAPLUS
 CN 1H-Benzimidazol-6-ol, 2-(4-hydroxyphenyl)-1-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

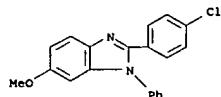
RN 196105-50-7 CAPLUS
 CN 1H-Benzimidazole-5-methanamine, 2-(4-chlorophenyl)-N-ethyl- α -methyl-1-phenyl-, (2Z)-2-butenedioate (9CI) (CA INDEX NAME)
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 CRN 175714-03-1
 CMF C23 H22 Cl1 N3



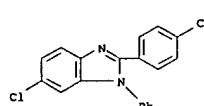
CM 2
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 CMF C4 H4 O4

Double bond geometry as shown.

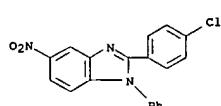
L3 ANSWER 29 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



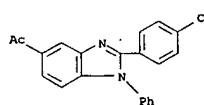
RN 175714-05-3 CAPLUS
 CN 1H-Benzimidazole, 6-chloro-2-(4-chlorophenyl)-1-phenyl- (9CI) (CA INDEX NAME)



RN 175714-07-5 CAPLUS
 CN 1H-Benzimidazole, 2-(4-chlorophenyl)-5-nitro-1-phenyl- (9CI) (CA INDEX NAME)

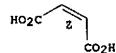


RN 175714-12-2 CAPLUS
 CN Ethanone, 1-(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-5-yl)- (9CI)
 (CA INDEX NAME)

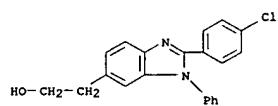


RN 175714-13-3 CAPLUS
 CN 1H-Benzimidazole-5-ethanol, 2-(4-chlorophenyl)-1-phenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 29 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



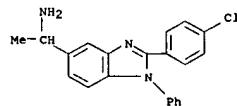
RN 196105-51-8 CAPLUS
 CN 1H-Benzimidazole-6-ethanol, 2-(4-chlorophenyl)-1-phenyl- (9CI) (CA INDEX NAME)



RN 196105-52-9 CAPLUS
 CN 1H-Benzimidazole-5-methanamine, 2-(4-chlorophenyl)- α -methyl-1-phenyl-, (2Z)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

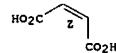
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CM 2

CRN 110-16-7
 CMF C4 H4 O4

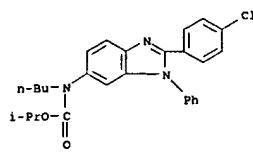
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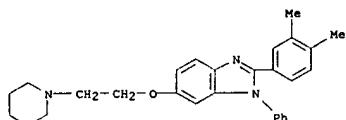
RN 196105-53-0 CAPLUS
 CN Carboxylic acid, butyl[2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl]-, 1-methyl- (9CI) (CA INDEX NAME)

L3 ANSWER 29 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

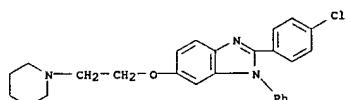
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IT 175714-00-8P 175714-14-4P 175714-15-5P
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (drug; preparation of benzimidazoles for treatment or prevention of
 sleep apnea)
 RN 175714-00-8 CAPLUS
 CN 1H-Benzimidazole, 2-(3,4-dimethylphenyl)-1-phenyl-6-[2-(1-piperidinyl)ethoxy]- (9CI) (CA INDEX NAME)



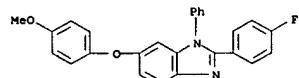
RN 175714-14-4 CAPLUS
 CN 1H-Benzimidazole,
 2-(4-chlorophenyl)-1-phenyl-6-[2-(1-piperidinyl)ethoxy]- (9CI) (CA INDEX NAME)



RN 175714-15-5 CAPLUS
 CN 1-Propanamine, 3-[(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]- N,N-dimethyl- (9CI) (CA INDEX NAME)

L3 ANSWER 30 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

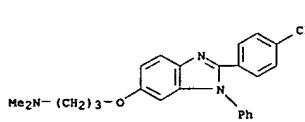
ACCESSION NUMBER: 1996:623266 CAPLUS
 DOCUMENT NUMBER: 125:329613
 TITLE: Poly(aryl ether benzimidazoles)
 AUTHOR(S): Twieg, R.; Matray, T.; Hedrick, J. L.
 CORPORATE SOURCE: Almaden Research Center, IBM Research Division, San Jose, CA, 95120-6099, USA
 SOURCE: Macromolecules (1996), 29(23), 7335-7341
 CODEN: MAMOBX; ISSN: 0024-9297
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB: A method for preparing poly(aryl ether benzimidazoles) was developed in which the generation of an ether linkage is the polymer-forming reaction. An appropriately substituted dihalo benzimidazole, 2,2'-bis(4-fluorophenyl)-6,6'-bibenzimidazole, was prepared and polymerized with bisphenols in aprotic dipolar solvents in the presence of K₂CO₃. High mol. weight polymers were obtained with T_g 220-250°. The resulting polymers were processable from solution and showed good thermal stability. This method affords poly(benzimidazole) analogs of poly(ether imides) with many of the same desirable characteristics.
 IT 175237-95-3P, 2-(4-Fluorophenyl)-6-(4-methoxyphenoxy)-1-phenylbenzimidazole
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; in preparation of aromatic polyether-polybenzimidazoles)
 RN 175237-95-3 CAPLUS
 CN 1H-Benzimidazole, 2-(4-fluorophenyl)-6-(4-methoxyphenoxy)-1-phenyl- (9CI) (CA INDEX NAME)



IT 183561-13-9P, 2-(4-Fluorophenyl)-6-(4-hydroxyphenoxy)-1-phenylbenzimidazole
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (monomer; in preparation of aromatic polyether-polybenzimidazoles)
 RN 183561-13-9 CAPLUS
 CN Phenol, 4-[(2-(4-fluorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

L3 ANSWER 29 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)

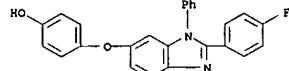


IT 175714-00-8P 175714-14-4P 175714-15-5P
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (drug; preparation of benzimidazoles for treatment or prevention of
 sleep apnea)

RN 175714-00-8 CAPLUS

CN 1H-Benzimidazole, 2-(3,4-dimethylphenyl)-1-phenyl-6-[2-(1-piperidinyl)ethoxy]- (9CI) (CA INDEX NAME)

L3 ANSWER 30 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

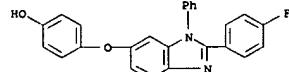


IT 183561-20-8P, 2-(4-Fluorophenyl)-6-(4-hydroxyphenoxy)-1-phenylbenzimidazole homopolymer 183561-21-9P, 2-(4-Fluorophenyl)-6-(4-hydroxyphenoxy)-1-phenylbenzimidazole homopolymer
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and properties of)
 RN 183561-20-8 CAPLUS
 CN Phenol, 4-[(2-(4-fluorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]-, homopolymer (9CI) (CA INDEX NAME)

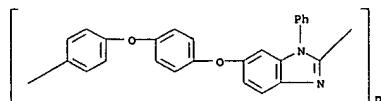
CN 1

CRN 183561-13-9

CMF C25 H17 F N2 O2



IT 183561-21-9 CAPLUS
 CN Poly[(1-phenyl-1H-benzimidazol-2,6-diyl)oxy-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)



L3 ANSWER 31 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1996:575401 CAPLUS
 DOCUMENT NUMBER: 125:223331

TITLE: Estimation of glass transition temperatures of poly(N-phenylbenzimidazole) polymers
 AUTHOR(S): Rajulu, A. Varada; Reddy, R. Lakshminarayana
 CORPORATE SOURCE: Dep. Polymer Sci. Technol., Sri Krishnadevaraya Univ.,

SOURCE: Anantapur, 515 003, India
 Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1996), 35B(10), 1107-1109
 CODEN: IJSDDB; ISSN: 0376-4699

PUBLISHER: Publications & Information Directorate, CSIR
 DOCUMENT TYPE: Journal

LANGUAGE: English
 AB The glass transition temps. of several poly(N-phenylbenzimidazole) polymers were estimated using two semi-empirical formulae based on group contribution method. The estimated values were compared with the exptl. values. The values estimated using the equation proposed by Amskaskii formulae are closer to the exptl. values than those estimated with the equation proposed by Van Krevelen.

IT 115490-01-2 115490-02-3 115490-03-4

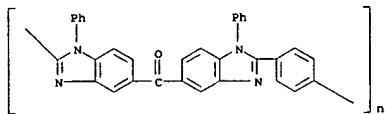
115490-04-5 115490-05-6 115515-37-2

181624-20-4 181624-22-6 181624-24-8

RL: PRP (Properties)
 (estimation of glass transition temps. of poly(phenylbenzimidazole) polymers)

RN 115490-01-2 CAPLUS

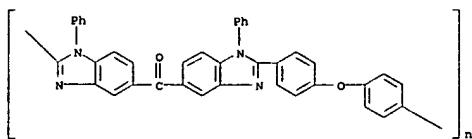
CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)carbonyl(1-phenyl-1H-benzimidazole-5,2-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)



RN 115490-02-3 CAPLUS

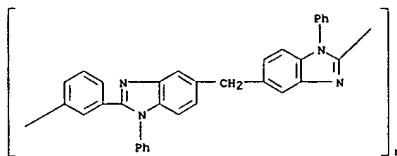
CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)carbonyl(1-phenyl-1H-benzimidazole-5,2-diyl)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)

L3 ANSWER 31 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



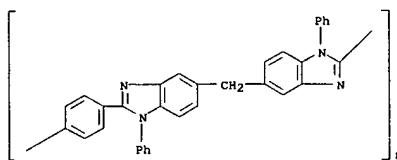
RN 115490-03-4 CAPLUS

CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)methylene(1-phenyl-1H-benzimidazole-5,2-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)



RN 115490-04-5 CAPLUS

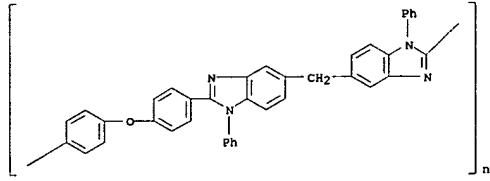
CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)methylene(1-phenyl-1H-benzimidazole-5,2-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)



RN 115490-05-6 CAPLUS

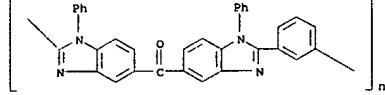
CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)methylene(1-phenyl-1H-benzimidazole-5,2-diyl)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)

L3 ANSWER 31 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



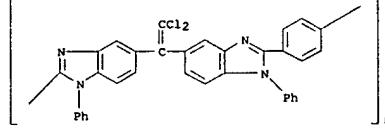
RN 115515-37-2 CAPLUS

CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)carbonyl(1-phenyl-1H-benzimidazole-5,2-diyl)-1,3-phenylene] (9CI) (CA INDEX NAME)



RN 181624-20-4 CAPLUS

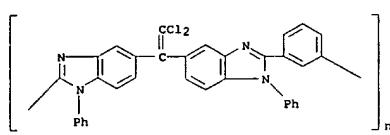
CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)(dichloroethenylidene)(1-phenyl-1H-benzimidazole-5,2-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)



RN 181624-22-6 CAPLUS

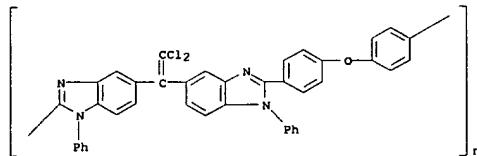
CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)(dichloroethenylidene)(1-phenyl-1H-benzimidazole-5,2-diyl)-1,3-phenylene] (9CI) (CA INDEX NAME)

L3 ANSWER 31 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 181624-24-8 CAPLUS

CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)(dichloroethenylidene)(1-phenyl-1H-benzimidazole-5,2-diyl)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)



L3 ANSWER 32 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:563632 CAPLUS

DOCUMENT NUMBER: 125:300996

TITLE: Preparation of benzimidazoles useful for treating physiological disorders associated with β -amyloid peptide

INVENTOR(S): Lunn, William H. W.; Monn, James A.; Zimmerman, Dennis

M.

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: U.S., 30 pp

CODEN: USXXAM

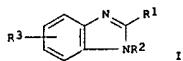
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5552426	A	19960903	US 1994-235400	19940429
PRIORITY APPLN. INFO.:			US 1994-235400	19940429

OTHER SOURCE(S): MARPAT 125:300996
GI

AB The title compds. [I: R₁ = H, alkoxy, (un)substituted alkyl, (un)substituted Ph, (un)substituted naphthyl, (un)substituted cycloalkyl; R₂ = H, alkyl, alkoxy, (un)substituted Ph, (un)substituted naphthyl, etc.; R₃ = H, alkanoyl, amino, alkyl, cycloalkyl, halogen, alkylthio, CF₃, etc.] (e.g., 1-phenyl-2-[3,4-dimethylphenyl]-6-[2-(1-piperidinyl)ethoxy]benzimidazole), which are useful in treating or preventing conditions associated with β -amyloid peptide (e.g., Alzheimer's disease, Down's syndrome, etc.), are prepared and

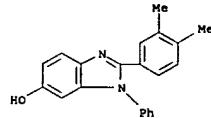
I-containin

fusions presented.

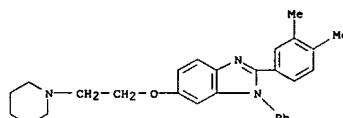
IT 175713-99-2P 175714-00-8P 175714-02-09
175714-04-2P 175714-05-3P 175714-07-5P
175714-08-6P 175714-10-0P 175714-11-1P
175714-12-2P 175714-13-3P 175714-14-4P
175714-15-5P 175714-16-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of benzimidazoles useful for treating physiol. disorders associated with β -amyloid peptide)

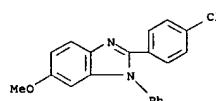
L3 ANSWER 32 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 175713-99-2 CAPLUS
CN 1H-Benzimidazol-6-ol, 2-(3,4-dimethylphenyl)-1-phenyl- (9CI) (CA INDEX NAME)

RN 175714-00-8 CAPLUS
CN 1H-Benzimidazole, 2-(3,4-dimethylphenyl)-1-phenyl-6-[2-(1-piperidinyl)ethoxy]- (9CI) (CA INDEX NAME)



RN 175714-02-0 CAPLUS
CN 1H-Benzimidazole, 2-(4-chlorophenyl)-6-methoxy-1-phenyl- (9CI) (CA INDEX NAME)

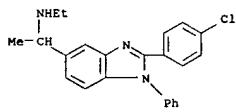


RN 175714-04-2 CAPLUS
CN 1H-Benzimidazole-5-methanamine, 2-(4-chlorophenyl)-N-ethyl- α -methyl-1-phenyl-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

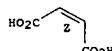
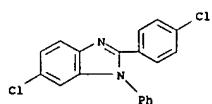
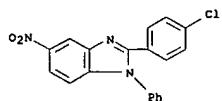
CM 1

CRN 175714-03-1
CMF C23 H22 Cl N3

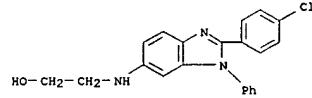
L3 ANSWER 32 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CM 2
CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.

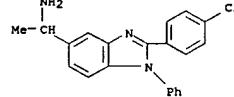
RN 175714-05-3 CAPLUS
CN 1H-Benzimidazole, 6-chloro-2-(4-chlorophenyl)-1-phenyl- (9CI) (CA INDEX NAME)RN 175714-07-5 CAPLUS
CN 1H-Benzimidazole, 2-(4-chlorophenyl)-5-nitro-1-phenyl- (9CI) (CA INDEX NAME)RN 175714-08-6 CAPLUS
CN Ethanol, 2-[(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)amino]- (9CI) (CA INDEX NAME)

L3 ANSWER 32 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

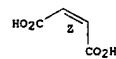


RN 175714-10-0 CAPLUS
CN 1H-Benzimidazole-5-methanamine, 2-(4-chlorophenyl)- α -methyl-1-phenyl-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 175714-09-7
CMF C21 H18 Cl N3CM 2
CRN 110-16-7
CMF C4 H4 O4

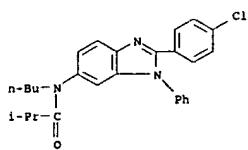
Double bond geometry as shown.



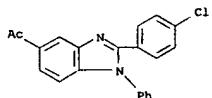
RN 175714-11-1 CAPLUS
CN Propanamide, N-butyl-N-(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)-2-methyl- (9CI) (CA INDEX NAME)

L3 ANSWER 32 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

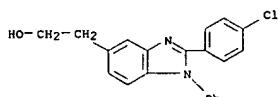
(Continued)



RN 175714-12-2 CAPLUS
 CN Ethanone, 1-[2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-5-yl]- (9CI)
 (CA INDEX NAME)



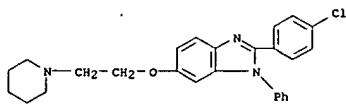
RN 175714-13-3 CAPLUS
 CN 1H-Benzimidazole-5-ethanol, 2-(4-chlorophenyl)-1-phenyl- (9CI) (CA INDEX NAME)



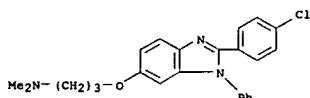
RN 175714-14-4 CAPLUS
 CN 1H-Benzimidazole, 2-(4-chlorophenyl)-1-phenyl-6-[2-(1-piperidinyl)ethoxy]- (9CI) (CA INDEX NAME)

L3 ANSWER 32 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

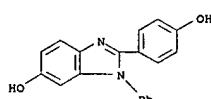
(Continued)



RN 175714-15-5 CAPLUS
 CN 1-Propanamine, 3-[(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]-N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 175714-16-6 CAPLUS
 CN 1H-Benzimidazol-6-ol, 2-(4-hydroxyphenyl)-1-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



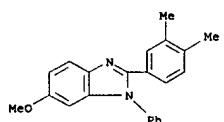
● HCl

IT 182742-84-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of benzimidazoles useful for treating physiol. disorders associated with β -amyloid peptide)

RN 182742-84-3 CAPLUS
 CN 1H-Benzimidazole, 2-(3,4-dimethylphenyl)-6-methoxy-1-phenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 32 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)



L3 ANSWER 33 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:515424 CAPLUS

DOCUMENT NUMBER: 125:247689

TITLE: Synthesis of a group of 1H-benzimidazoles and their screening for antiinflammatory activity

AUTHOR(S): Evans, D.; Hicks, T. A.; Williamson, W. R. N.; Dawson,

CORPORATE SOURCE: W.; Meacock S. C. R.; Kitchen, E. A. Organic Chem. Dep., Lilly Res. Centre, Ltd., Surrey, GU20 6PR, UK

SOURCE: European Journal of Medicinal Chemistry (1996), 31(7-8), 635-642

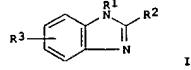
CODEN: EJMCA5; ISSN: 0223-5234

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

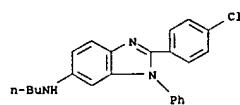
GI



AB 1H-Benzimidazoles, e.g., I [R1 = H, Me, Ph, etc., R2 = 4-C1C6H4, 4-HOC6H4, H, etc., R3 = 5(6)-MeO, 7-OEt, 7-OH, 5-Cl, 5-N-pyrrolidinoethoxy, etc.], were prepared and tested for antiinflammatory activity.

IT 182060-46-4P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and antiinflammatory activity of benzimidazoles)

RN 182060-46-4 CAPLUS
 CN 1H-Benzimidazol-6-amine, N-butyl-2-(4-chlorophenyl)-1-phenyl- (9CI) (CA INDEX NAME)

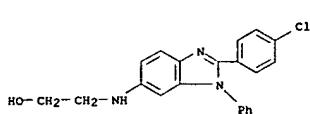


IT 175714-08-6P 175714-10-0P 182060-25-9P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (preparation and antiinflammatory activity of benzimidazoles)

RN 175714-08-6 CAPLUS
 CN Ethanol, 2-[(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)amino]- (9CI) (CA INDEX NAME)

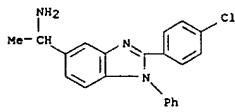
L3 ANSWER 33 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)



RN 175714-10-0 CAPLUS
 CN 1H-Benzimidazole-5-methanamine, 2-(4-chlorophenyl)-α-methyl-1-phenyl-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

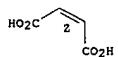
CM 1

CRN 175714-09-7
CMF C21 H18 Cl N3

CM 2

CRN 110-16-7
CMF C4 H4 O4

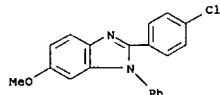
Double bond geometry as shown.



RN 182060-25-9 CAPLUS
 CN Ethanamine,
 2-[(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)

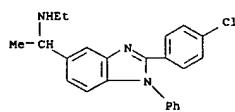
L3 ANSWER 33 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)



RN 175714-04-2 CAPLUS
 CN 1H-Benzimidazole-5-methanamine, 2-(4-chlorophenyl)-N-ethyl-α-methyl-1-phenyl-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

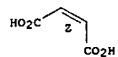
CM 1

CRN 175714-03-1
CMF C23 H22 Cl N3

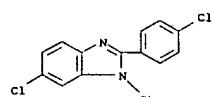
CM 2

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.



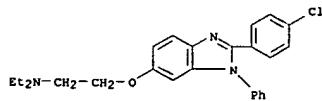
RN 175714-05-3 CAPLUS
 CN 1H-Benzimidazole, 6-chloro-2-(4-chlorophenyl)-1-phenyl- (9CI) (CA INDEX NAME)



RN 175714-07-5 CAPLUS
 CN 1H-Benzimidazole, 2-(4-chlorophenyl)-5-nitro-1-phenyl- (9CI) (CA INDEX NAME)

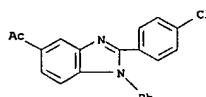
L3 ANSWER 33 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)



• 2 HCl

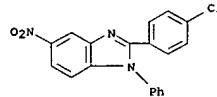
IT 175714-12-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and antiinflammatory activity of benzimidazoles)
 RN 175714-12-2 CAPLUS
 CN Ethanone, 1-(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-5-yl)- (9CI)
 (CA INDEX NAME)



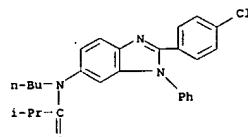
IT 175714-02-0P 175714-04-2P 175714-05-3P
 175714-07-5P 175714-11-1P 175714-14-4P
 175714-15-5P 175714-16-6P 182060-18-0P
 182060-22-6P 182060-29-3P 182060-37-3P
 182060-62-4P 182060-66-8P 182060-79-3P
 182060-86-2P 182060-89-5P 182060-92-0P
 182060-95-3P 182060-99-6P 182061-33-2P
 182061-35-4P 182061-37-6P 182061-40-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and antiinflammatory activity of benzimidazoles)
 RN 175714-02-0 CAPLUS
 CN 1H-Benzimidazole, 2-(4-chlorophenyl)-6-methoxy-1-phenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 33 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

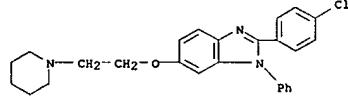
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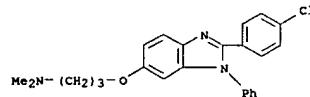
RN 175714-11-1 CAPLUS
 CN Propanamide,
 N-butyl-N-[2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl]-2-methyl- (9CI) (CA INDEX NAME)



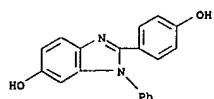
RN 175714-14-4 CAPLUS
 CN 1H-Benzimidazole,
 2-(4-chlorophenyl)-1-phenyl-6-(2-(1-piperidinyl)ethoxy)- (9CI) (CA INDEX NAME)



RN 175714-15-5 CAPLUS
 CN 1-Propanamine, 3-[(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]-N,N-dimethyl- (9CI) (CA INDEX NAME)

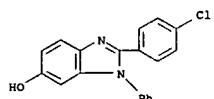


L3 ANSWER 33 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 RN 175714-16-6 CAPLUS
 CN 1H-Benzimidazol-6-ol, 2-(4-hydroxyphenyl)-1-phenyl-, monohydrochloride
 (9CI) (CA INDEX NAME)

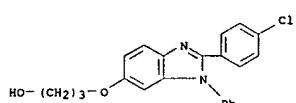


● HCl

RN 182060-18-0 CAPLUS
 CN 1H-Benzimidazol-6-ol, 2-(4-chlorophenyl)-1-phenyl- (9CI) (CA INDEX NAME)

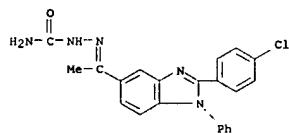


RN 182060-22-6 CAPLUS
 CN 1-Propanol, 3-[(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



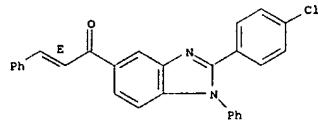
RN 182060-29-3 CAPLUS
 CN 1H-Benzimidazole, 6-methoxy-2-(4-methoxyphenyl)-1-phenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 33 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



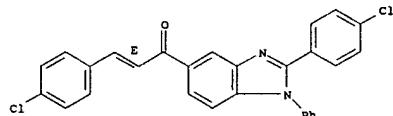
RN 182060-86-2 CAPLUS
 CN 2-Propen-1-one, 1-[2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-5-yl]-3-phenyl-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 182060-89-5 CAPLUS
 CN 2-Propen-1-one, 3-(4-chlorophenyl)-1-[2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-5-yl]-, (E)- (9CI) (CA INDEX NAME)

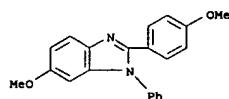
Double bond geometry as shown.



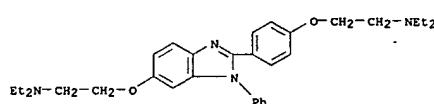
RN 182060-92-0 CAPLUS
 CN 2-Propen-1-one, 1-[2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-5-yl]-3-(3,4-dichlorophenyl)-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

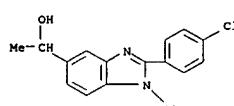
L3 ANSWER 33 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



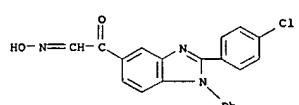
RN 182060-37-3 CAPLUS
 CN Ethanamine, 2-[4-[(2-(diethylamino)ethoxy)-1-phenyl-1H-benzimidazol-2-yl]phenoxy]-N,N-diethyl- (9CI) (CA INDEX NAME)



RN 182060-62-4 CAPLUS
 CN 1H-Benzimidazole-5-methanol, 2-(4-chlorophenyl)- α -methyl-1-phenyl- (9CI) (CA INDEX NAME)

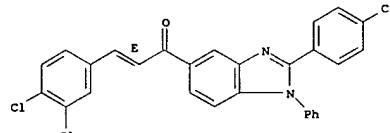


RN 182060-66-8 CAPLUS
 CN 1H-Benzimidazole-5-acetaldehyde, 2-(4-chlorophenyl)- α -oxo-1-phenyl-, aldoxime (9CI) (CA INDEX NAME)



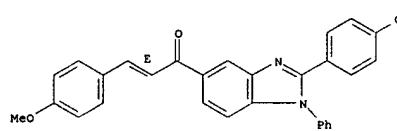
RN 182060-79-3 CAPLUS
 CN Hydrazinecarboxamide, 2-(1-(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-5-

L3 ANSWER 33 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



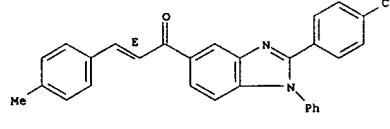
RN 182060-95-3 CAPLUS
 CN 2-Propen-1-one, 1-[2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-5-yl]-3-(4-methoxyphenyl)-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 182060-98-6 CAPLUS
 CN 2-Propen-1-one, 1-[2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-5-yl]-3-(4-methylphenyl)-, (E)- (9CI) (CA INDEX NAME)

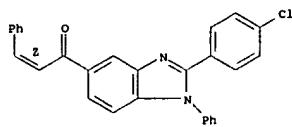
Double bond geometry as shown.



RN 182061-33-2 CAPLUS
 CN 2-Propen-1-one, 1-[2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-5-yl]-3-(4-phenyl)-, (Z)- (9CI) (CA INDEX NAME)

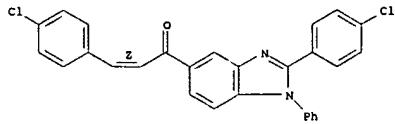
Double bond geometry as shown.

L3 ANSWER 33 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



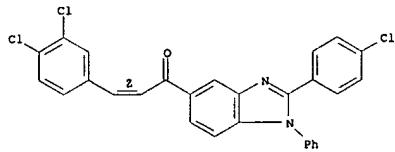
RN 182061-35-4 CAPLUS
 CN 2-Propen-1-one, 3-(4-chlorophenyl)-1-(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-5-yl)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 182061-37-6 CAPLUS
 CN 2-Propen-1-one, 1-(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-5-yl)-3-(3,4-dichlorophenyl)-, (Z)- (9CI) (CA INDEX NAME)

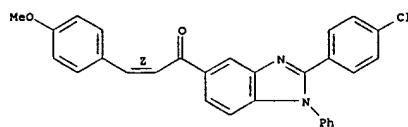
Double bond geometry as shown.



RN 182061-40-1 CAPLUS
 CN 2-Propen-1-one, 1-(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-5-yl)-3-(4-methoxyphenyl)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L3 ANSWER 33 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L3 ANSWER 34 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:514175 CAPLUS

DOCUMENT NUMBER: 125:196984

TITLE: An IR spectroscopic study of H-bonding and polymer-water and polymer-H-donor molecule interactions in polynaphthoylenimide derivatives

AUTHOR(S): Chenskaya, T. B.; Perov, N. S.; Ponomarev, I. I.

CORPORATE SOURCE: Russian Academy Science, Institute Synthetic

Polymeric

Materials, Russia

SOURCE: Journal of Molecular Structure (1996), 381(1-3,

Horizon in Hydrogen Bond Research 1995), 149-156

CODEN: JMOSB4; ISSN: 0022-2860

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The processes of sorption-desorption of water, phenol and chlorophenol mols. and H/D isotope exchange in N-phenyl-substituted polynaphthoylenimidebenzimidazole (PNIBPH) and polynaphthoylenimides bearing various substituents in the diamine moiety (PNI) have been investigated by FTIR spectroscopy. Different types of water have been identified in PNIBPH and PNI. Phenol and chlorophenol, added to PNIBPH and PNI, compete with water mols. for H-bonding with CO and NR groups,

and affect the H-bond network in polymers. A temperature anomaly has been observed in the IR spectra of PNIBPH and PNI, analogous to that reported earlier for PNI, suggestive of a common nature of this effect.

IT 181189-61-7

RL: PRP (Properties)
 (hydrogen bonding, polymer-water, and polymer-hydrogen donor mol. interactions in polynaphthoylenimide derivs.)

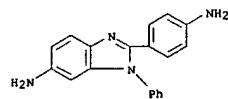
RN 181189-61-7 CAPLUS

CN [2]Benzopyran-1,3,6,8-tetron, polymer with 2-(4-aminophenyl)-1-phenyl-1H-benzimidazol-6-amine (9CI) (CA INDEX NAME)

CM 1

CRN 181189-60-6

CMF C19 H16 N4

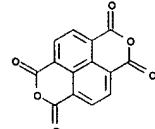


CM 2

CRN 81-30-1

CMF C14 H4 O6

L3 ANSWER 34 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L3 ANSWER 35 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:290275 CAPLUS

DOCUMENT NUMBER: 125:10699

TITLE: Synthesis of 2-(Perfluoroalkyl)- and 2-(Perfluoroaryl)benzimidazoles by Oxidative Intramolecular Cyclization of Perfluoroalkyl and Aryl Imidamides

AUTHOR(S): Kobayashi, Masafumi; Uneyama, Kenji
CORPORATE SOURCE: Faculty of Engineering, Okayama University, Okayama, 700, Japan

SOURCE: Journal of Organic Chemistry (1996), 61(11), 3902-3905

PUBLISHER: CODEN: JOCEAH; ISSN: 0022-3263

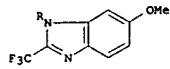
DOCUMENT TYPE: American Chemical Society

LANGUAGE: Journal

OTHER SOURCE(S): English

CASREACT 125:10699

GI



I

AB Oxidative intramol. cyclization of perfluoroalkyl and aryl imidamides and related compds. has been examined. Oxidation with CAN and electrochem.

oxidation

gave benzimidazoles in reasonable yields. E.g., electrooxidn. of 4-MeOC6H4NHC(F3):NCGH4OMe-4 in MeCN gave benzimidazole I (R = 4-MeOC6H4) quant. In contrast, lead(IV) acetate oxidation gave the benzimidazole together with some benzooquinone imines and their acetals. Chlorination occurred predominantly on the aromatic ring by oxidation with t-Bu hypochlorite

or NCS. The electrochem. oxidative cyclization to benzimidazoles can be applied to the corresponding alkyl, Ph, and pentafluorophenyl imidamides.

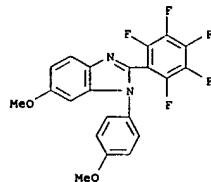
IT 177422-41-2P 177422-42-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of benzimidazoles by oxidative intramol. cyclization of imidamides)

RN 177422-41-2 CAPLUS

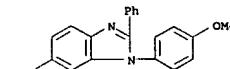
CN 1H-Benzimidazole, 6-methoxy-1-(4-methoxyphenyl)-2-(pentafluorophenyl)- (9CI) (CA INDEX NAME)

L3 ANSWER 35 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 177422-42-3 CAPLUS

CN 1H-Benzimidazole, 6-methoxy-1-(4-methoxyphenyl)-2-phenyl- (9CI) (CA INDEX NAME)



L3 ANSWER 36 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:252224 CAPLUS

DOCUMENT NUMBER: 124:289536

TITLE: Preparation of benzimidazole derivatives as non-peptide tachykinin receptor antagonists

INVENTOR(S): Burns, Robert Frederick, Jr.; Gitter, Bruce Donald; Monn, James Allen; Zimmerman, Dennis Michael

PATENT ASSIGNEE(S): Eli Lilly and Co., USA

SOURCE: Can. Pat. Appl., 143 pp.

CODEN: CPXXER

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2148053	AA	1995/10/30	CA 1995-2148053	1995/04/27
EP 694535	A1	1996/01/31	EP 1995-302707	1995/04/24
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE			ZA 1995-3311	1995/04/24
ZA 9503311	A	1996/10/24	ZA 1995-3311	1995/04/24
BR 9501770	A	1995/11/21	BR 1995-1770	1995/04/25
AU 9517656	A1	1995/11/09	AU 1995-17656	1995/04/26
CN 1113236	A	1995/12/13	CN 1995-104725	1995/04/26
NO 9501613	A	1995/10/30	NO 1995-1613	1995/04/27
FI 9502064	A	1995/10/30	FI 1995-2064	1995/04/28
HU 70637	A2	1995/10/30	HU 1995-1249	1995/04/28
JP 08109169	A2	1996/04/30	JP 1995-105297	1995/04/28
PRIORITY APPLN. INFO.:			US 1994-235401	A 1994/04/29

OTHER SOURCE(S): CASREACT 124:289536; MARPAT 124:289536
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

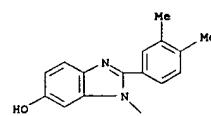
AB Title compds. [I; R1, R2 = H, C1-C12 alkyl, C1-C6 alkoxy, etc.; R3 = H, NO2, C1-C6 alkyl, etc.], useful in treatment of CNS disorders, acute and chronic obstructive airway diseases, inflammatory diseases, allergies,

cutaneous diseases, etc., were prepared and formulated. Condensation of 4,3-H2N(O2N)C6H3OH with 3,4,5-(MeO)3C6H2COCl in PhMe/PhH followed by reaction of the intermediate II with PhCHO under H2 in the presence of Pd/C in DMF, cyclization of the intermediate III using POCl3/CHCl3, deprotection of the 6-OH group with 1N NaOH/THF and acidification with 1N HCl afforded I. HCl [R1 = 3,4,5-(MeO)3C6H2; R2 = PhCH2; R3 = 6-OH] which showed IC50 of 1.130 μ M against binding to human NK-1 receptor in cultured cell assays.

IT 175713-99-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (preparation of benzimidazole derivs. as non-peptide tachykinin receptor antagonists)

RN 175713-99-2 CAPLUS

L3 ANSWER 36 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
CN 1H-Benzimidazol-6-ol, 2-(3,4-dimethylphenyl)-1-phenyl- (9CI) (CA INDEX NAME)

IT 175714-00-8P 175714-02-0P 175714-04-2P

175714-05-3P 175714-07-5P 175714-08-6P

175714-10-0P 175714-11-1P 175714-12-2P

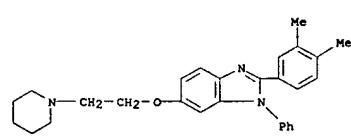
175714-13-3P 175714-14-4P 175714-15-5P

175714-16-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of benzimidazole derivs. as non-peptide tachykinin receptor antagonists)

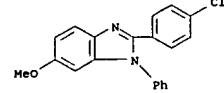
RN 175714-00-8 CAPLUS

CN 1H-Benzimidazole, 2-(3,4-dimethylphenyl)-1-phenyl-6-[2-(1-piperidinyl)ethoxy]- (9CI) (CA INDEX NAME)



RN 175714-02-0 CAPLUS

CN 1H-Benzimidazole, 2-(4-chlorophenyl)-6-methoxy-1-phenyl- (9CI) (CA INDEX NAME)



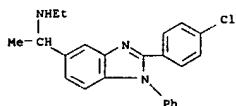
RN 175714-04-2 CAPLUS

CN 1H-Benzimidazole-5-methanamine, 2-(4-chlorophenyl)-N-ethyl- α -methyl-1-phenyl-, (Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

L3 ANSWER 36 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)

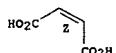
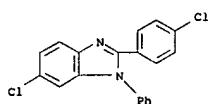
CM 1

CRN 175714-03-1
CMF C23 H22 Cl N3

CM 2

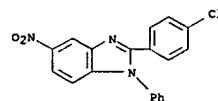
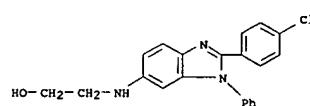
CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.

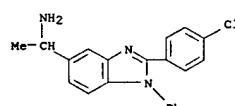
RN 175714-05-3 CAPLUS
CN 1H-Benzimidazole, 6-chloro-2-(4-chlorophenyl)-1-phenyl- (9CI) (CA INDEX NAME)RN 175714-07-5 CAPLUS
CN 1H-Benzimidazole, 2-(4-chlorophenyl)-5-nitro-1-phenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 36 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)

RN 175714-08-6 CAPLUS
CN Ethanol, 2-[(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)amino]- (9CI) (CA INDEX NAME)RN 175714-10-0 CAPLUS
CN 1H-Benzimidazole-5-methanamine, 2-(4-chlorophenyl)- α -methyl-1-phenyl-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

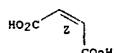
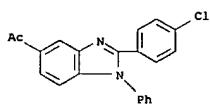
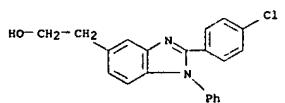
CM 1

CRN 175714-09-7
CMF C21 H18 Cl N3CM 2
CRN 110-16-7
CMF C4 H4 O4

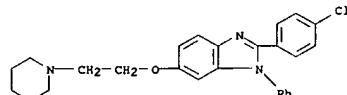
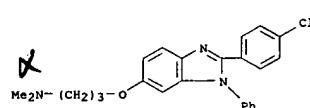
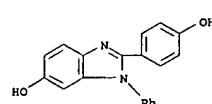
Double bond geometry as shown.

X

L3 ANSWER 36 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

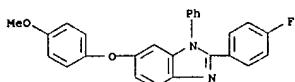
RN 175714-11-1 CAPLUS
CN Propanamide,
N-butyl-N-(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)-2-methyl- (9CI) (CA INDEX NAME)RN 175714-12-2 CAPLUS
CN Ethanone, 1-(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-5-yl)- (9CI) (CA INDEX NAME)RN 175714-13-3 CAPLUS
CN 1H-Benzimidazole-5-ethanol, 2-(4-chlorophenyl)-1-phenyl- (9CI) (CA INDEX NAME)RN 175714-14-4 CAPLUS
CN 1H-Benzimidazole,
2-(4-chlorophenyl)-1-phenyl-6-[2-(1-piperidinyl)ethoxy]- (9CI) (CA INDEX NAME)

L3 ANSWER 36 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

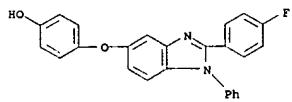
RN 175714-15-5 CAPLUS
CN 1-Propanamine, 3-[(2-(4-chlorophenyl)-1-phenyl-1H-benzimidazol-6-yl)oxy]-N,N-dimethyl- (9CI) (CA INDEX NAME)RN 175714-16-6 CAPLUS
CN 1H-Benzimidazol-6-ol, 2-(4-hydroxyphenyl)-1-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

L3 ANSWER 37 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACESSION NUMBER: 1996:202456 CAPLUS
 DOCUMENT NUMBER: 124:261890
 TITLE: Poly(aryl ether benzazole)s. Self-polymerization of
 AB monomers via benzimidazole-activated ether synthesis
 AUTHOR(S): Matray, T. J.; Twieg, R. J.; Hedrick, James L.
 CORPORATE SOURCE: Research Division, IBM Almaden Research Center, San
 Jose, CA, 95120-6099, USA
 SOURCE: ACS Symposium Series (1996), 624 (Step-Growth Polymers
 for High-Performance Materials), 266-75
 CODEN: ACSMC8; ISSN: 0097-6156
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB 1-Phenyl-2-(4-fluorophenyl)-5-(4-hydroxyphenoxy)benzimidazole was
 synthesized in several steps and homopolymerd. to give a polyether. The
 polymer had glass temperature about 240°.
 IT 175237-95-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent); (Intermediate; preparation and homopolymer. of
 1-phenyl-2-(4-fluorophenyl)-5-(4-hydroxyphenoxy)benzimidazole)
 RN 175237-95-3 CAPLUS
 CN 1H-Benzimidazole, 2-(4-fluorophenyl)-6-(4-methoxyphenoxy)-1-phenyl- (9CI)
 (CA INDEX NAME)



IT 140185-98-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent); (monomer; preparation and homopolymer. of
 1-phenyl-2-(4-fluorophenyl)-5-(4-hydroxyphenoxy)benzimidazole)
 RN 140185-98-2 CAPLUS
 CN Phenol, 4-[(2-(4-fluorophenyl)-1-phenyl-1H-benzimidazol-5-yl)oxy]- (9CI)
 (CA INDEX NAME)



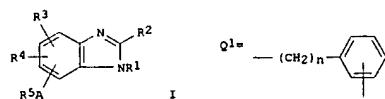
Same inventors

L3 ANSWER 38 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACESSION NUMBER: 1995:737335 CAPLUS
 DOCUMENT NUMBER: 123:143893
 TITLE: Preparation of benzimidazoles as prostacyclin PG12
 mimetics.
 INVENTOR(S): Kuhnke, Joachim; Echle, Emil; Thierauch, Karl-Heinz;
 Verhellen, Peter
 PATENT ASSIGNEE(S): Schering A.-G., Germany
 SOURCE: Ger. Offen. 14 pp.
 CODEN: GWXXBX

DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4330959	A1	19950316	DE 1993-4330959	19930909
WO 9507263	A1	19950316	WO 1994-EP2948	19940506
W: JP, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRIORITY APPLN. INFO.: DE 1993-4330959				A 19930909

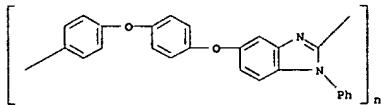
OTHER SOURCE(S): MARPAT 123:143893
 GI



AB Title compds. (I; R1, R2 = (substituted) Ph, heteroaryl; R3, R4 = H, halo, alkyl, perfluoroalkyl, alkoxy, perfluoroalkoxy, carboxyl, alkoxy carbonyl, NO₂, amino, etc.; A = bond, (O- or S-interrupted) alkylene, alkenylene, alkynylene, Q1; n = 1-4; R5 = carboxyl, SO₃H, PO₃H₂, tetrazolyl), were prepared as PG12 mimetics and TXA2/GH2 antagonists useful in treating thrombosis, arteriosclerosis, and hyperlipidemia (no data). Thus, 1,2-diphenyl-1H-benzimidazol-6-ol, MeO₂CH₂Br, and K2CO₃ were refluxed 3 h in acetone to give Me [(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]acetate, which was stirred 24 h in a mixture of aqueous NaOH, THF, and MeOH to give [(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]acetic acid.

IT 166396-70-9P 166396-71-0P 166396-72-1P
 166396-73-2P 166396-74-3P 166396-75-4P
 166396-76-5P 166396-77-6P 166396-78-7P
 166396-79-8P 166396-80-1P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses); (preparation of benzimidazoles as prostacyclin PG12 mimetics)
 RN 166396-70-9 CAPLUS

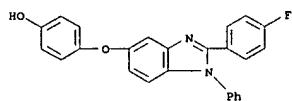
L3 ANSWER 37 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 IT 140084-18-8P 140185-99-3P
 RL: SPN (Synthetic preparation); PREP (Preparation); (preparation and homopolymer. of 1-phenyl-2-(4-fluorophenyl)-5-(4-hydroxyphenoxy)benzimidazole)
 RN 140084-18-8 CAPLUS
 CN Poly[1-phenyl-1H-benzimidazole-2,5-diyl]oxy-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)



RN 148185-99-3 CAPLUS
 CN Phenol, 4-[(2-(4-fluorophenyl)-1-phenyl-1H-benzimidazol-5-yl)oxy]-, homopolymer (9CI) (CA INDEX NAME)

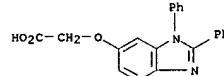
CM 1

CRN 148185-98-2
 CMF C25 H17 F N2 O2

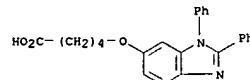


X

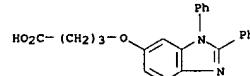
L3 ANSWER 38 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 CN Acetic acid, [(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



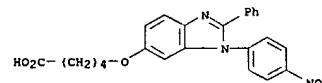
RN 166396-71-0 CAPLUS
 CN Pentanoic acid, 5-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)



RN 166396-72-1 CAPLUS
 CN Butanoic acid, 4-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

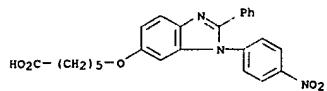


RN 166396-73-2 CAPLUS
 CN Pentanoic acid, 5-[(1-(4-nitrophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

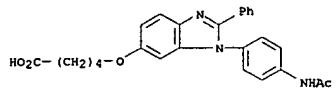


RN 166396-74-3 CAPLUS
 CN Hexanoic acid, 6-[(1-(4-nitrophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]- (9CI) (CA INDEX NAME)

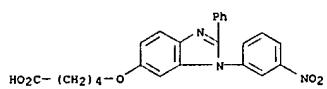
L3 ANSWER 38 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



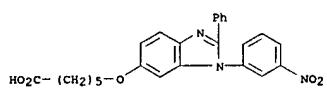
RN 166396-75-4 CAPLUS
 CN Pentanoic acid, 5-((1-(4-(acetylaminophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)- (9CI) (CA INDEX NAME)



RN 166396-76-5 CAPLUS
 CN Pentanoic acid, 5-((1-(3-nitrophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)- (9CI) (CA INDEX NAME)

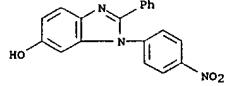


RN 166396-77-6 CAPLUS
 CN Hexanoic acid, 6-((1-(3-nitrophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)- (9CI) (CA INDEX NAME)

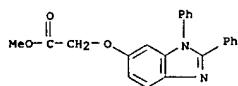


RN 166396-78-7 CAPLUS
 CN Pentanoic acid, 5-((1-((4-chlorophenyl)sulfonyl)amino)phenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)- (9CI) (CA INDEX NAME)

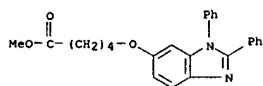
L3 ANSWER 38 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 CN 1H-Benzimidazol-6-ol, 1-(4-nitrophenyl)-2-phenyl- (9CI) (CA INDEX NAME)



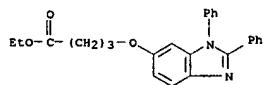
IT 166396-81-2P 166396-82-3P 166396-83-4P
 166396-84-5P 166396-85-6P 166396-86-7P
 166396-87-8P 166396-88-9P 166396-90-3P
 166396-91-4P 166396-92-5P 166396-93-6P
 166396-94-7P 166396-95-8P
 RL: RCT (Reactant); RACT (Reactant or reagent); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of benzimidazoles as prostacyclin PGI2 mimetics)
 RN 166396-81-2 CAPLUS
 CN Acetic acid, ((1,2-diphenyl-1H-benzimidazol-6-yl)oxy)-, methyl ester
 (9CI) (CA INDEX NAME)



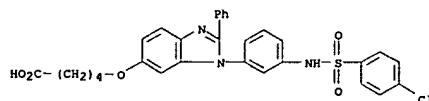
RN 166396-82-3 CAPLUS
 CN Pentanoic acid, 5-((1,2-diphenyl-1H-benzimidazol-6-yl)oxy)-, methyl ester
 (9CI) (CA INDEX NAME)



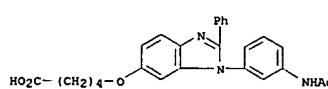
RN 166396-83-4 CAPLUS
 CN Butanoic acid, 4-((1,2-diphenyl-1H-benzimidazol-6-yl)oxy)-, ethyl ester
 (9CI) (CA INDEX NAME)



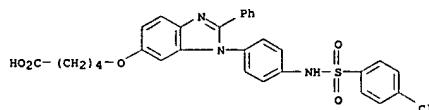
L3 ANSWER 38 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



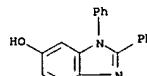
RN 166396-79-8 CAPLUS
 CN Pentanoic acid, 5-((1-(3-(acetylaminophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)- (9CI) (CA INDEX NAME)



RN 166396-80-1 CAPLUS
 CN Pentanoic acid, 5-((1-((4-chlorophenyl)sulfonyl)amino)phenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)- (9CI) (CA INDEX NAME)

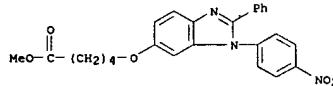


IT 117125-04-9 117125-05-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of benzimidazoles as prostacyclin PGI2 mimetics)
 RN 117125-04-9 CAPLUS
 CN 1H-Benzimidazol-6-ol, 1,2-diphenyl- (9CI) (CA INDEX NAME)

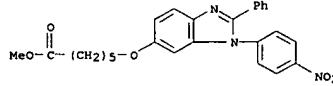


RN 117125-05-0 CAPLUS

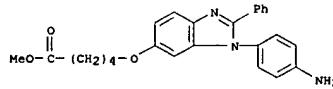
L3 ANSWER 38 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 RN 166396-84-5 CAPLUS
 CN Pentanoic acid, 5-((1-(4-nitrophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-, methyl ester (9CI) (CA INDEX NAME)



RN 166396-85-6 CAPLUS
 CN Hexanoic acid, 6-((1-(4-nitrophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-, methyl ester (9CI) (CA INDEX NAME)

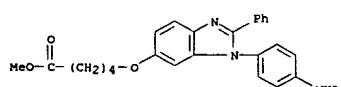


RN 166396-86-7 CAPLUS
 CN Pentanoic acid, 5-((1-(4-aminophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

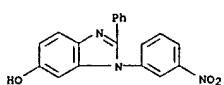


● HCl

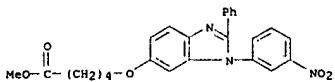
RN 166396-87-8 CAPLUS
 CN Pentanoic acid, 5-((1-(4-(acetylaminophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-, methyl ester (9CI) (CA INDEX NAME)



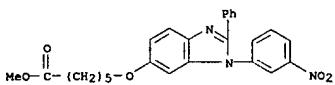
L3 ANSWER 38 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 RN 166396-88-9 CAPLUS
 CN 1H-Benzimidazol-6-ol, 1-(3-nitrophenyl)-2-phenyl- (9CI) (CA INDEX NAME)



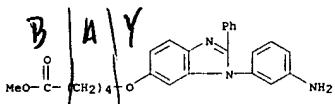
RN 166396-90-3 CAPLUS
 CN Pentanoic acid, 5-((1-(3-nitrophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-, methyl ester (9CI) (CA INDEX NAME)



RN 166396-91-4 CAPLUS
 CN Hexanoic acid, 6-((1-(3-nitrophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-, methyl ester (9CI) (CA INDEX NAME)



RN 166396-92-5 CAPLUS
 CN Pentanoic acid, 5-((1-(3-aminophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-, methyl ester (9CI) (CA INDEX NAME)

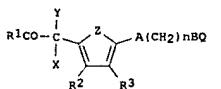


RN 166396-93-6 CAPLUS
 CN Pentanoic acid, 5-((1-(3-((4-chlorophenyl)sulfonyl)amino)phenyl)-2-phenyl-

L3 ANSWER 39 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1995:277045 CAPLUS
 DOCUMENT NUMBER: 122:46487
 TITLE: CAT-1 inhibitors, their synthesis, pharmaceutical compositions, and methods of use
 INVENTOR(S): Guthrie, Robert W.; Mullin, John G., Jr.; Kachensky, David F.; Kierstead, Richard W.; Tilley, Jefferson W.;
 Heathers, Guy P.; Higgins, Alan J.; Lemahieu, Ronald A.
 PATENT ASSIGNEE(S): Hoffman-La Roche Inc., USA
 SOURCE: U.S., 65 pp. Cont.-in-part of U.S. Ser. No. 698, 014, abandoned.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

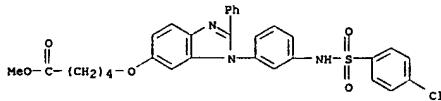
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5344843	A	19940906	US 1992-850620	19920313
RU 2059603	C1	19960510	RU 1992-5011784	19920131
EP 512352	A2	19921111	EP 1992-107135	19920427
EP 512352	A3	19930310		
EP 512352	B1	19960327		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, PT, SE				
AT 136018	E	19960415	AT 1992-107135	19920427
AU 9216003	A1	19921112	AU 1992-16003	19920504
AU 653398	B2	19920923		
CA 2068076	AA	19921119	CA 1992-2068076	19920506
ZA 9203279	A	19930127	ZA 1992-3279	19920506
NO 9201840	A	19921110	NO 1992-1538	19920508
HU 63602	A2	19930928	HU 1992-1538	19920508
JP 05219353	A2	19931026	JP 1992-143375	19920508
JP 07107060	B4	19951115		
RO 109938	B1	19950728	RO 1992-622	19920508
BR 9201769	A	19921229	BR 1992-1769	19920511
PRIORITY APPLN. INFO.: US 1991-698014 B2 19910509				
US 1992-850620 A 19920313				

OTHER SOURCE(S): MARPAT 122:46487
 GI

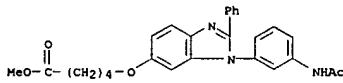


AB The invention relates to compds. I (R1 = OH; R2, R3 = H, alkyl, aryl, alkoxy, etc.; X, Y together = O, or one is amino and other is H; Z = S, CR2=CR2'; A = bond, O, S, SO, CHCH, etc.; B = bond, O, S, SO, etc.; Q =

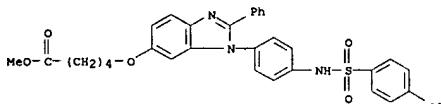
L3 ANSWER 38 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 1H-benzimidazol-6-yl)oxy)-, methyl ester (9CI) (CA INDEX NAME)



RN 166396-94-7 CAPLUS
 CN Pentanoic acid, 5-((1-(3-(acetylaminophenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-, methyl ester (9CI) (CA INDEX NAME)



RN 166396-95-8 CAPLUS
 CN Pentanoic acid, 5-((1-(4-chlorophenyl)sulfonyl)amino)phenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy)-, methyl ester (9CI) (CA INDEX NAME)



L3 ANSWER 39 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 Ph, cyclohexyl, pyridinyl, etc.; n = 1-6) and their pharmaceutically acceptable salts, and when appropriate, enantiomers, racemates, diastereomers or mixts. thereof or geometric isomers or mixts. thereof, and

pharmaceutically acceptable salts thereof. The compds. inhibit carnitine acyltransferase 1 (CAT-1) and are therefore useful in the prevention of injury to ischemic tissue, and can limit infarct size, improve cardiac function and prevent arrhythmias during and following a myocardial infarction. 5-[(2-(2-Naphthalenyl)oxyethyl)oxy]-α-oxo-2-thiopentanoic acid (prepn. given) inhibited CAT-1 with an IC50 = 0.05 μM. Tablet and capsule formulations contg. 4-(2-(2-naphthalenyl)ethoxy)-α-oxo-pentanoic acid are presented.

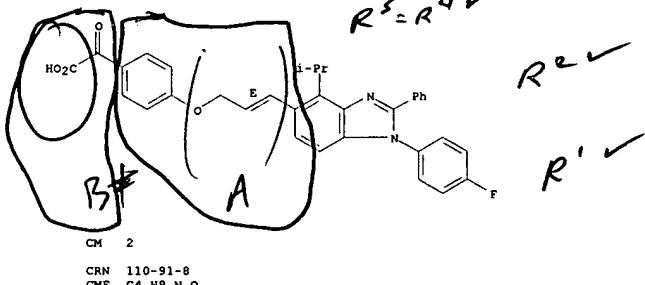
IT 160062-17-9 CAPLUS
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); B10 (Biological study); PREP (Preparation); USES (Uses) (synthesis and pharmaceutical compns. and use of carnitine acyltransferase inhibitor compds.)

RN 160062-17-9 CAPLUS
 CN Benzenoacetic acid, 4-[(1-(4-fluorophenyl)-4-(1-methylethyl)-2-phenyl-1H-benzimidazol-5-yl)-2-propenyl]oxy)-α-oxo-, (E)-, compd. with morpholine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 160062-16-8
 CMF C33 H27 F N2 O4

Double bond geometry as shown.

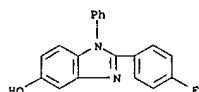


L3 ANSWER 39 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)

L3 ANSWER 40 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1993:603985 CAPLUS
 DOCUMENT NUMBER: 119:203995
 TITLE: Synthesis of polybenzimidazoles via aromatic nucleophilic substitution reactions of self-polymerizable (A-B) monomers
 AUTHOR(S): Harris, Frank W.; Ahn, Byung H.; Cheng, Stephen Z. D.
 CORPORATE SOURCE: Coll. Polym. Sci. Polym., Univ. Akron, Akron, OH, 44325-3909, USA
 SOURCE: Polymer (1993), 34(14), 3083-95
 CODEN: POLMAG; ISSN: 0032-3861
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Self-polymerizable (A-B) polybenzimidazole (PBI) monomers have been prepared and converted to PBIs via aromatic nucleophilic substitution reactions. Thus, 2-(4-fluorophenyl)-5(6)-hydroxy-benzimidazole (I) and 2-(4-fluorophenyl)-5-hydroxy-1-phenylbenzimidazole (II) have been prepared and polymerized at 230-250° in N-cyclohexyl-2-pyrrolidinone containing potassium carbonate. The imidazole ring in these monomers activated the F atom for nucleophilic displacement by the phenate ion. The resulting polymers were soluble in N-methyl-2-pyrrolidinone (NMP) and had intrinsic viscosities that ranged from 0.6 to 2.6 dl g-1 (NMP at 30°). The Tg obtained from I was semicryst. with a glass transition temperature (Tg) of 365°, while the poly(N-phenylbenzimidazole) (III) obtained from II was amorphous with a Tg of 278°. Thin films of the III polymer were tough and flexible, having tensile strength as high as 100 mPa, while those of the PBI polymer were brittle. The PBI retained 95% of its weight to 450° when subjected to thermogravimetric anal. (TGA) in air, while the II retained 95% of its weight to 535° under the same conditions. In order to lower the Tg and also to improve the mech. properties of the PBI, II was copolymerd. with I. The Tg values of the copolymers decreased from 342° to 296° as their II content increased from 25 to 75 mol%, while the tensile strengths of thin films of the copolymers increased with increasing II content. Random copolymers were also prepared from a self-polymerizable poly(phenylquinoline) monomer and I.
 IT 150773-65-2P 150773-66-3P 150811-45-3P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and crystallinity and thermal properties of)
 RN 150773-65-2 CAPLUS
 CN 1H-Benzimidazol-5-ol, 2-(4-fluorophenyl)-1-phenyl-, homopolymer (9CI) (CA INDEX NAME)
 CM 1
 CRN 150772-74-0
 CMF C19 H13 F N2 O

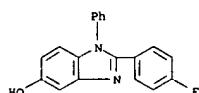
L3 ANSWER 40 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



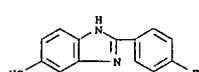
RN 150773-66-3 CAPLUS
 CN 1H-Benzimidazol-5-ol, 2-(4-fluorophenyl)-1-phenyl-, polymer with 2-(4-fluorophenyl)-1H-benzimidazol-5-ol (9CI) (CA INDEX NAME)

CM 1

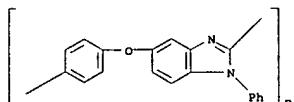
CRN 150772-74-0
 CMF C19 H13 F N2 O



CM 2
 CRN 150772-68-2
 CMF C13 H9 F N2 O



RN 150811-45-3 CAPLUS
 CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)oxy-1,4-phenylene] (9CI) (CA INDEX NAME)



IT 150772-73-9P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and ether cleavage of)

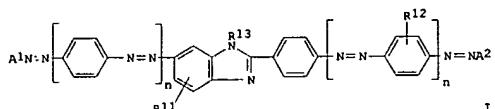
Searched by Jason M. Nolan

Page 61

L3 ANSWER 41 OF 81 CAPLUS COPYRIGHT 2006 ACS ON STN
ACCESSION NUMBER: 1993:505849 CAPLUS
DOCUMENT NUMBER: 119:105948
TITLE: Electrophotographic photoreceptor,
electrophotographic apparatus and facsimile using said photoreceptor
INVENTOR(S): Go, Shintetsu
PATENT ASSIGNEE(S): Canon KK, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JTOXKAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 05061223	A2	19930312	JP 1991-242444	19910825
PRIORITY APPLN. INFO.:				

GI

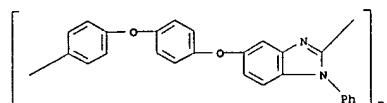


AB The title photoreceptor comprises an elec. conductive support having thereon a photosensitive layer containing azo dye I. For I, A1, A2 = coupler residue; further details on said coupler residue are given; R11 = H, alkyl; R12 = H, alkyl, alkoxy, etc.; R13 = H, alkyl, aryl; n = 0 or 1. The title apparatus and facsimile are also claimed. The title photoreceptor

photoreceptor
shows high sensitivity.
IT 149244-52-0
RL: USES (Uses)

(electrophotog. photoreceptors containing)
 RN 14924-52-0 CAPLUS
 CN 2-Naphthaleneoxazine, 4-[(4-[6-[(3-[3,5-dichlorophenyl]amino)carbonyl]amino)carbonyl]trifluoromethyl]-2-hydroxy-1-naphthalenylazo]-1-(phenyl-1H-benzimidazol-2-yl)-2-methylphenyl]azo)-3-hydroxy-N-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

L3 ANSWER 42 OF 81 CAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 1993:428742 CAPLUS
 DOCUMENT NUMBER: 119:28742
 TITLE: Cyclic ureas as solvents for poly(aryl ether) synthesis
 AUTHOR(S): Labadie, J. W.; Carter, K. R.; Hedrick, J. L.;
 Jonsson, H.; Kim, S. Y.; Twieg, R. J.
 CORPORATE SOURCE: Almaden Res. Cent., IBM Res., San Jose, CA,
 95120-6077, USA
 SOURCE: Polymer Bulletin (Berlin, Germany) (1993), 30(1),
 25-31
 CODEN: PODUR; ISSN: 0170-0839
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The synthesis of various poly(aryl ethers) and related small mol. compds
 were examined using the cyclic urea
 1,3-Dimethyl-3,4,5,6-tetrahydro-2-(1H)-
 pyrimidinone, (N,N'-dimethylpropylene urea, DMPU) as the solvent.
 Generally higher mol. weight or yields were obtained under less stringent
 conditions, as compared to other common polymerization solvents. The
 enhancement
 was most notable for poly(mes, involving aryl fluorides with a lower
 reactivity than conventionally activated dihalide monomers, e.g. ketones
 and sulfones. Poly(aryl ethers) displayed excellent solubility in DMPU,
 which was
 beneficial in the cases where more rigid heterocyclic-aryl ether polymer
 are formed.
 IT 148084-18-8 148105-99-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation in DMPU solvent and intrinsic viscosity of)
 RN 148084-18-8 CAPLUS
 CN Poly[(1-phenyl-1H-benzimidazolo[2,5-d]phenyleneoxy-2,5-diyl)oxy-1,4-
 phenylene] (9CI) (CA INDEX NAME)



RN 148185-99-3 CAPLUS
CN Phenol, 4-[(2-(4-fluorophenyl)-1-phenyl-1H-benzimidazol-5-yl)oxy]-, (2E)-
[5S,5aR,6aR,7aR]- (csc, 5,5a,6a,7a)

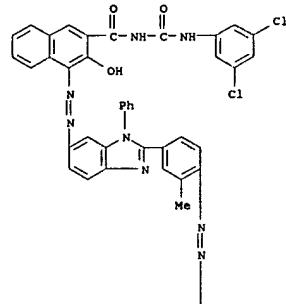
GM

CRN 148185-98-2
CMF C25 H17 F N2 02

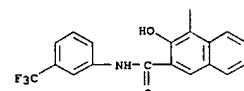
L3 ANSWER 41 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

(Continued)

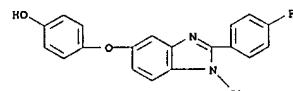
PAGE 1-A



PAGE 2-A



L3 ANSWER 42 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



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L3 ANSWER 43 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1991:680702 CAPLUS

DOCUMENT NUMBER: 115:280702

TITLE: Synthesis of N-substituted polybenzimidazoles by cyclodehydrogenation of precursor poly(Schiff bases)

AUTHOR(S): Kane, James J.; Qian, Weinan

CORPORATE SOURCE: Chem. Dep., Wright State Univ., Dayton, OH, 45435,

USA

SOURCE: Polymer Preprints (American Chemical Society,

Division

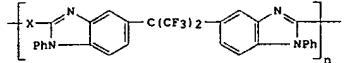
of Polymer Chemistry) (1991), 32(3), 232-3

CODEN: ACPPEA; ISSN: 0032-3934

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB Polybenzimidazoles I ($X = 1,3$, $1,4$ -C₆H₄, 4 -C₆H₄OC₆H₄- 4) were prepared from 3,4-(H₂N)(PhNH)C₆H₃(CF₃)₂C₆H₃(NH₂)(NPh) and OHCXCHO via the intermediate poly(Schiff bases). The poly(Schiff bases) were converted to

I by treatment with air in the presence of FeCl₃.

IT 133661-04-8P 133661-05-9P 133751-55-0P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and properties of)

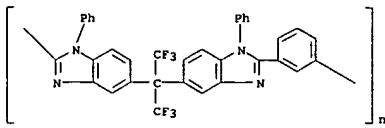
RN 133661-04-8 CAPLUS

CN Poly(1-phenyl-1H-benzimidazole-2,5-diyl){2,2,2-trifluoro-1-(trifluoromethyl)ethylidene}(1-phenyl-1H-benzimidazole-5,2-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

L3 ANSWER 43 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

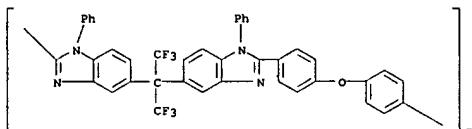
Phenylene] (9CI) (CA INDEX NAME)

(Continued)



RN 133751-55-0 CAPLUS

CN Poly(1-phenyl-1H-benzimidazole-2,5-diyl){2,2,2-trifluoro-1-(trifluoromethyl)ethylidene}(1-phenyl-1H-benzimidazole-5,2-diyl)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)



AB Polybenzimidazoles I ($X = 1,3$, $1,4$ -C₆H₄, 4 -C₆H₄OC₆H₄- 4) were prepared from 3,4-(H₂N)(PhNH)C₆H₃(CF₃)₂C₆H₃(NH₂)(NPh) and OHCXCHO via the intermediate poly(Schiff bases). The poly(Schiff bases) were converted to

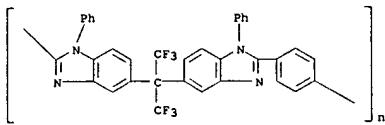
I by treatment with air in the presence of FeCl₃.

IT 133661-04-8P 133661-05-9P 133751-55-0P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and properties of)

RN 133661-04-8 CAPLUS

CN Poly(1-phenyl-1H-benzimidazole-2,5-diyl){2,2,2-trifluoro-1-(trifluoromethyl)ethylidene}(1-phenyl-1H-benzimidazole-5,2-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)



RN 133661-05-9 CAPLUS
CN Poly(1-phenyl-1H-benzimidazole-2,5-diyl){2,2,2-trifluoro-1-(trifluoromethyl)ethylidene}(1-phenyl-1H-benzimidazole-5,2-diyl)-1,4-

L3 ANSWER 44 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1991:207944 CAPLUS

DOCUMENT NUMBER: 114:207944

TITLE: New approaches to the synthesis of N-substituted polybenzimidazoles

AUTHOR(S): Kane, James J.; Tomlinson, Ronald C.; Reinhardt, Bruce

CORPORATE SOURCE: Chem. Dep., Wright State Univ., Dayton, OH, 45435,
USA
SOURCE: Polymer Preprints (American Chemical Society,
Divisionof Polymer Chemistry) (1990), 31(2), 709-10
CODEN: ACPPEA; ISSN: 0032-3934

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The title polybenzimidazoles were prepared by copolymer of [3,4-(tertBuO₂CNH)(PhNH)C₆H₃]₂C(F₃)₂ with aromatic diacids, i.e., terephthalic acid, isophthalic acid, or 4,4'-oxybis(benzoic acid) or from the corresponding diacid chlorides with [3,4-(H₂N)(PhNH)C₆H₃]₂C(F₃)₂.

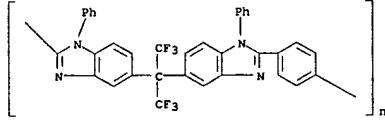
The former method used polyphosphoric acid trimethylsilyl ester as a dehydrating agent and yielded the polybenzimidazoles directly, while the latter method proceeded via a polyamide.

IT 133661-04-8P 133661-05-9P 133751-55-0P

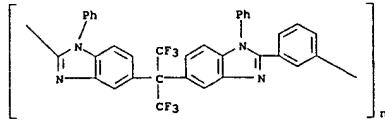
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 133661-04-8 CAPLUS

CN Poly(1-phenyl-1H-benzimidazole-2,5-diyl){2,2,2-trifluoro-1-(trifluoromethyl)ethylidene}(1-phenyl-1H-benzimidazole-5,2-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)



RN 133661-05-9 CAPLUS
CN Poly(1-phenyl-1H-benzimidazole-2,5-diyl){2,2,2-trifluoro-1-(trifluoromethyl)ethylidene}(1-phenyl-1H-benzimidazole-5,2-diyl)-1,4-



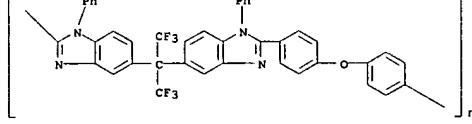
L3 ANSWER 44 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

Phenylene] (9CI) (CA INDEX NAME)

(Continued)

RN 133751-55-0 CAPLUS

CN Poly(1-phenyl-1H-benzimidazole-2,5-diyl){2,2,2-trifluoro-1-(trifluoromethyl)ethylidene}(1-phenyl-1H-benzimidazole-5,2-diyl)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)



L3 ANSWER 45 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1989:584110 CAPLUS

DOCUMENT NUMBER: 111:164110

TITLE: Electrophotographic photoreceptor with disazo dye-containing photoconductive layer

INVENTOR(S): Takai, Hideyuki; Umehara, Masahige; Matsumoto, Masakazu

PATENT ASSIGNEE(S): Canon K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JOKXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01021453	A2	19890124	JP 1987-177031	19870717
JP 2538266	B2	19960925	JP 1987-177031	19870717

PRIORITY APPLN. INFO.:

GI

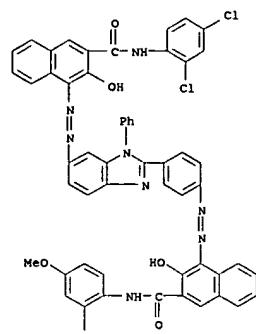
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB In the title photoreceptor, a photoconductive layer contains a disazo dye I (R1, R2 = H, alkyl, aryl, aralkyl, heterocyclyl, alkoxy, halogen, nitro, cyano; Z = O, S, NR3 (R3 = H, alkyl, aryl, aralkyl); A1, A2 = coupler moiety with a phenolic OH; A1 = A2). I is used as a charge-generating agent. A photoreceptor with II charge-generating agent showed V0 = -700 V, and E1/2 = 3.9 lx-s.

IT 123336-18-2
RL: USES (Uses)
(charge generator, electrophotog. photoreceptor with)

RN 123336-18-2 CAPLUS

CN 2-Naphthalenecarboxamide, 4-[(4-[6-[(3-[(2,4-dichlorophenyl)amino]carbonyl)-2-hydroxy-1-naphthalenyl]azo]-1-phenyl-1H-benzimidazol-2-yl)phenyl]azo]-3-hydroxy-N-(4-methoxy-2-methylphenyl)-(9CI) (CA INDEX NAME)



(Continued)

PAGE 1-A

Me

PAGE 2-A

L3 ANSWER 46 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1989:85382 CAPLUS

DOCUMENT NUMBER: 110:85382

TITLE: Electrophotographic photoreceptor containing charge-transporting benzimidazole derivative

INVENTOR(S): Shino, Yasuko; Matsumoto, Masakazu

PATENT ASSIGNEE(S): Canon K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JOKXAF

DOCUMENT TYPE: Patent

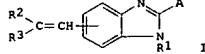
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63157157	A2	19880630	JP 1986-303856	19861222
			JP 1986-303856	19861222

GI



AB The title photoreceptor has a photosensitive layer containing a benzimidazole derivative I (R1 = alkyl, aryl, heterocyclyl; R2, R3 = H, R1, aralkyl; R2, R3, and the central C may form a ring residue; A = aralkyl, R1).

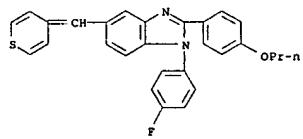
IT 119028-27-2 119028-29-4 119028-31-8

119028-33-0

RL: TEM (Technical or engineered material use); USES (Uses)
(electrophotog. charge-transporting agent)

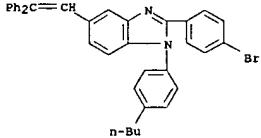
RN 119028-27-2 CAPLUS

CN 1H-Benzimidazole, 1-(4-fluorophenyl)-2-(4-propoxypyhenyl)-5-(4H-thiopyran-4-ylideneethyl)-(9CI) (CA INDEX NAME)



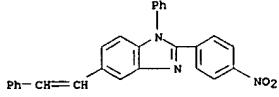
RN 119028-29-4 CAPLUS
CN 1H-Benzimidazole, 2-(4-bromophenyl)-1-(4-butylphenyl)-5-(2,2-diphenylethethyl)-(9CI) (CA INDEX NAME)

L3 ANSWER 46 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



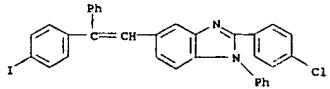
RN 119028-31-8 CAPLUS

CN 1H-Benzimidazole, 2-(4-nitrophenyl)-1-phenyl-5-(2-phenylethethyl)-(9CI) (CA INDEX NAME)

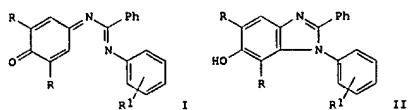


RN 119028-33-0 CAPLUS

CN 1H-Benzimidazole, 2-(4-chlorophenyl)-5-[2-(4-iodophenyl)-2-phenylethethyl]-1-phenyl-(9CI) (CA INDEX NAME)



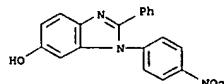
L3 ANSWER 47 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1988-590316 CAPLUS
 DOCUMENT NUMBER: 109:190316
 TITLE: New benzimidazole synthesis
 AUTHOR(S): Benincori, T.; Sannicolo, F.
 CORPORATE SOURCE: CNR, Univ. Milano, Milan, 20133, Italy
 SOURCE: Journal of Heterocyclic Chemistry (1988), 25(3), 1029-33
 DOCUMENT TYPE: CODEN: JHTCAD; ISSN: 0022-152X
 Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 109:190316
 GI



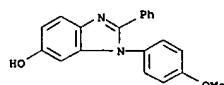
AB Thermal or acid catalyzed cyclization of several N-(N-arylbenzimidoyl)-1,4-benzquinoneimines I (R = H, Cl, Me; R1 = H, 4-NO₂, 4-MeO, 4-Cl, 4-Me, 2,5-Me₂, 2,6-Me₂) affords 1-aryl-6-hydroxy-2-phenylbenzimidazoles II in fairly good yields. Structural proofs and kinetic support for the reaction mechanism are given.
 IT 117125-04-59 117125-05-09 117125-06-19
 117125-07-29 117125-08-3P 117125-09-4P
 117125-10-79 117125-11-8P 117125-12-9P
 117125-16-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 117125-04-9 CAPLUS
 CN 1H-Benzimidazol-6-ol, 1,2-diphenyl- (9CI) (CA INDEX NAME)

RN 117125-05-0 CAPLUS
 CN 1H-Benzimidazol-6-ol, 1-(4-nitrophenyl)-2-phenyl- (9CI) (CA INDEX NAME)

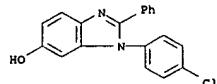
L3 ANSWER 47 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



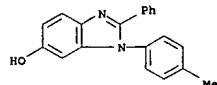
RN 117125-06-1 CAPLUS
 CN 1H-Benzimidazol-6-ol, 1-(4-methoxyphenyl)-2-phenyl- (9CI) (CA INDEX NAME)



RN 117125-07-2 CAPLUS
 CN 1H-Benzimidazol-6-ol, 1-(4-chlorophenyl)-2-phenyl- (9CI) (CA INDEX NAME)



RN 117125-08-3 CAPLUS
 CN 1H-Benzimidazol-6-ol, 1-(4-methylphenyl)-2-phenyl- (9CI) (CA INDEX NAME)



RN 117125-09-4 CAPLUS
 CN 1H-Benzimidazol-6-ol, 1-(2,6-dimethylphenyl)-2-phenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 47 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

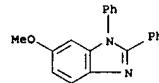
RN 117125-10-7 CAPLUS
 CN 1H-Benzimidazol-6-ol, 1-(2,5-dimethylphenyl)-2-phenyl- (9CI) (CA INDEX NAME)

RN 117125-11-8 CAPLUS
 CN 1H-Benzimidazol-6-ol, 5,7-dichloro-1,2-diphenyl- (9CI) (CA INDEX NAME)

RN 117125-12-9 CAPLUS
 CN 1H-Benzimidazol-6-ol, 1-(2,6-dimethylphenyl)-5,7-dimethyl-2-phenyl- (9CI) (CA INDEX NAME)

RN 117125-16-3 CAPLUS
 CN 1H-Benzimidazole, 6-methoxy-1,2-diphenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 47 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



X

L3 ANSWER 48 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1988:474002 CAPLUS

DOCUMENT NUMBER: 109:74002

TITLE: Synthesis of poly(N-phenylbenzimidazoles) based on DDT

AUTHOR(S): Korshak, V. V.; Rusanov, A. L.; Kakauridze, R. G.; Fidler, S. Kh.; Tugushi, D. S.

CORPORATE SOURCE: Inst. Elementoorg. Soedin., Moscow, USSR

SOURCE: Doklady Akademii Nauk SSSR (1987), 297(6), 1386-90

[Chem.]

CODEN: DANKAS; ISSN: 0002-3264

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Bis(N-phenyl-o-phenylenediamine) derivs. of DDT were prepared in 55-80% yields and polymerized with aromatic dicarboxylic acid dichlorides to give

poly(o-phenylenoamides) which were cyclized in the 2nd stage of the synthesis to give the title polymers. Both poly(o-phenylenoamides) and title polymers were characterized by viscosity, solubility, degradation temperature, and softening point. The optimal conditions for the polymerization stage were

monomer concentration 0.3 + 103 mol/m3, temperature 293-298 K, and time 3.6 + 104 s. The optimal conditions for the cyclization stage were temperature 453 K and time 1.8 + 104 s. The title polymers were soluble in such compds. as DMSO, m-cresol, H2SO4, and HCO2H; their 10% weight loss temperature

Was 723-833 K and their softening point varied from 535 to 610 K.

IT 115490-01-2P 115490-02-3P 115490-03-4P

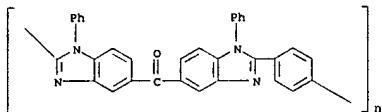
115490-04-5P 115490-05-6P 115515-37-2P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and properties of)

RN 115490-01-2 CAPLUS

CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)carbonyl(1-phenyl-1H-

benzimidazole-5,2-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)



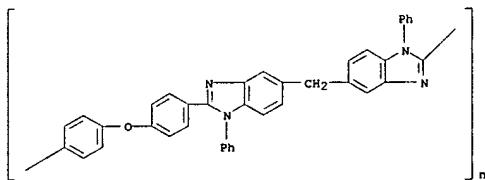
RN 115490-02-3 CAPLUS

CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)carbonyl(1-phenyl-1H-

benzimidazole-5,2-diyl)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)

L3 ANSWER 48 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

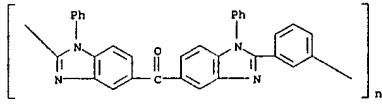
(Continued)



RN 115515-37-2 CAPLUS

CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)carbonyl(1-phenyl-1H-

benzimidazole-5,2-diyl)-1,3-phenylene] (9CI) (CA INDEX NAME)

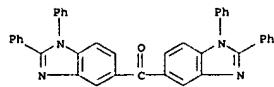


IT 115664-03-4P 115664-04-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, from DDT, as model for poly(N-phenylbenzimidazoles))

RN 115664-03-4 CAPLUS

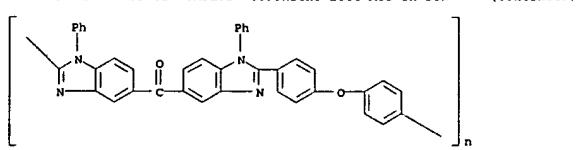
CN Methanone, bis(1,2-diphenyl-1H-benzimidazol-5-yl)- (9CI) (CA INDEX NAME)



RN 115664-04-5 CAPLUS

CN 1H-Benzimidazole, 5,5'-methylenebis[1,2-diphenyl- (9CI) (CA INDEX NAME)

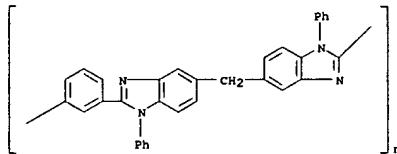
L3 ANSWER 48 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 115490-03-4 CAPLUS

CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)methylene(1-phenyl-1H-

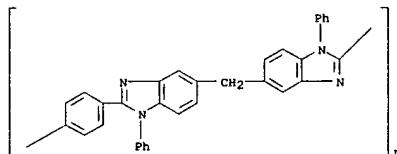
benzimidazole-5,2-diyl)-1,3-phenylene] (9CI) (CA INDEX NAME)



RN 115490-04-5 CAPLUS

CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)methylene(1-phenyl-1H-

benzimidazole-5,2-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

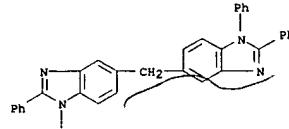


RN 115490-05-6 CAPLUS

CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)methylene(1-phenyl-1H-

benzimidazole-5,2-diyl)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)

L3 ANSWER 48 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L3 ANSWER 49 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1988:438330 CAPLUS

DOCUMENT NUMBER: 109:38330

TITLE: synthesis and study of polybenzazoles containing diphenylsilyl groups

AUTHOR(S): Korshak, V. V.; Khananashvili, L. M.; Rusanov, A. L.; Batskhrikidze, B. A.; Kekauridze, R. G.; Kipiani, L. G.

CORPORATE SOURCE: Inst. Elementoorg. Soedin. im. Nesmeyanova, Moscow, USSR

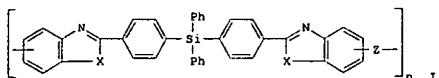
SOURCE: Vysokomolekulyarnye Soedineniya, Seriya B: Kratkie Soobshcheniya (1988), 30(4), 315-17

CODEN: VYSAI; ISSN: 0507-5483

DOCUMENT TYPE: Journal

LANGUAGE: Russian

GI



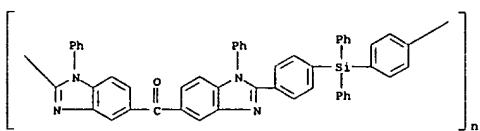
AB The title polymers (I; X = O, NPh; Z = CO, CH2) were prepared by polycondensation of bis[p-(chlorocarbonyl)phenyl]diphenylsilane with 3,3'-diamino-4,4'-dihydroxybiphenylmethane, 3,3'-diamino-4,4'-dihydroxybiphenophenone, 4,4'-bis(phenylamino)-3,3'-diaminobiphenophenone, or 4,4'-bis(phenylamino)-3,3'-diaminodiphenylmethane in the presence of HCl with subsequent cyclodehydration of the functional group-containing polyamide prepolymer. The presence of Ph2Si groups led to improved solubility. I were soluble in organic solvents such as DMF, methylpyrrolidone, and tetrachloroethene-PhOH mixts. The Ph2Si groups were comparable to ether linkages with respect to their influence on the softening temperature and were intermediate between ether and CO linkages with respect to their influence on the degradation temperature.

IT 115137-15-0P 115137-16-1P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and properties of)

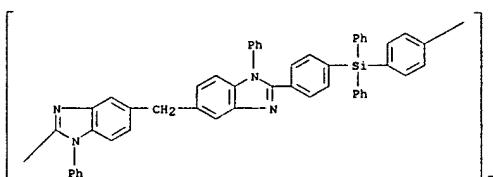
RN 115137-15-0 CAPLUS

CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)carbonyl(1-phenyl-1H-benzimidazole-5,2-diyl)-1,4-phenylene(diphenylsilylene)-1,4-phenylene] (9CI) (CA INDEX NAME)

L3 ANSWER 49 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 115137-16-1 CAPLUS
CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)methylene(1-phenyl-1H-benzimidazole-5,2-diyl)-1,4-phenylene(diphenylsilylene)-1,4-phenylene] (9CI) (CA INDEX NAME)



L3 ANSWER 50 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1987:431170 CAPLUS

DOCUMENT NUMBER: 107:31170

TITLE: Electrophotographic charge-generating azo compound

INVENTOR(S): Anayama, Hideki; Matsumoto, Masakazu; Yamashita, Masataka

PATENT ASSIGNEE(S): Canon K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

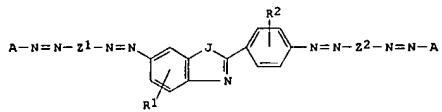
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 61254948	A2	1986-11-12	JP 1985-96368	19850507
JP 05013503	B4	19930222		

PRIORITY APPLN. INFO.: JP 1985-96368 19850507

GI



AB The azo compound has the formula I [R1 = H, alkyl, halo; R2 = H, alkyl, alkoxy, etc.; Z1, Z2 = arylene, heterocylene; A = coupler residue having phenolic OH group; J = O, S, NR (R = H, aryl, alkyl)]. An organic composite photoconductor was prepared by dispersing in a poly(vinyl butyral) binder an azo compound of the formula I [R1 = H; R2 = Me (ortho to azo group); Z1 = Z2 = 1,4-phenylene; A = naphthol AS coupler residue; J = O] to give a charge-generating layer and dispersing in a PMMA binder a hydrazone to form a charge-transporting layer. The photoconductor showed improved sensitivity and voltage stability after producing 5000 copies.

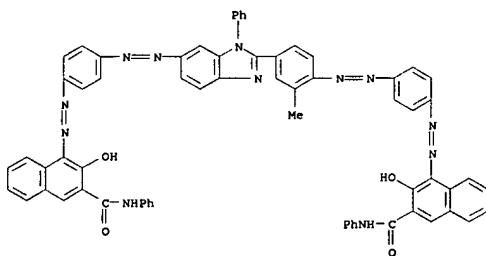
IT 108938-76-7 108938-77-8

RL: USES (Uses)
(electrophotog. charge-generating compound)

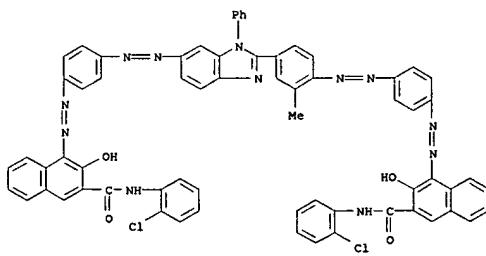
RN 108938-76-7 CAPLUS

CN 2-Naphthalene carboxamide, 3-hydroxy-4-[(4-[(2-[4-((2-hydroxy-3-[(phenylamino)carbonyl]-1-naphthalenyl)azo]phenyl)azo]-3-methylphenyl)-1-phenyl-1H-benzimidazol-6-yl)azo]phenyl]azo-N-phenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 50 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 108938-77-8 CAPLUS
CN 2-Naphthalene carboxamide, N-(2-chlorophenyl)-4-[(4-[(4-[(2-chlorophenyl)amino]carbonyl)-2-hydroxy-1-naphthalenyl)azo]phenyl)azo]-3-methylphenyl)-1-phenyl-1H-benzimidazol-6-yl)azo]phenyl]azo-3-hydroxy- (9CI) (CA INDEX NAME)



L3 ANSWER 51 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1987:198029 CAPLUS
 DOCUMENT NUMBER: 106:198029
 TITLE: Synthetic fibrids for heat-resistant high-modulus sheets
 INVENTOR(S): Mera, Hiroshi; Nishihara, Toshio; Endo, Zenichiro
 PATENT ASSIGNEE(S): Agency of Industrial Sciences and Technology, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62006958	A2	19870113	JP 1985-144577	19850703
US 4749753	A	19880607	US 1986-880828	19860701
PRIORITY APPLN. INFO.:			JP 1985-144576	A 19850703
			JP 1985-144577	A 19850703
			JP 1985-144578	A 19850703
			JP 1985-163057	A 19850725

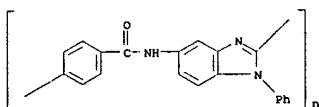
AB The title sheets are prepared by wet spinning together polymers with high rigidity and heat-bondable polymers to form fibrids and then hot pressing the fibrids. Thus, a mixture of 20.0 parts poly(p-phenylenebenzobisthiazole) and 20.0 parts poly(m-phenyleneisophthalamide-terephthalimide) in 2600 parts methanesulfonic acid was spun into a coagulating bath, sheared in a mixer, and washed to give fibrids. A slurry containing these fibrids was fed to a papermaking machine and pressed 15 h at

310° to give a heat-resistant paper substitute with ratio of tensile strength in MPa to modulus in GPa 19:15.

IT 26615-36-1
 RL: USES (Uses)
 (fiber, biconstituent with polyazole fibers, fibrids, for heat-resistant paper substitutes)

RN 26615-36-1 CAPLUS

CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)iminocarbonyl-1,4-phenylene] (9CI) (CA INDEX NAME)



L3 ANSWER 52 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1987:198028 CAPLUS
 DOCUMENT NUMBER: 106:198028
 TITLE: Manufacture of heat-bondable synthetic fibrids
 INVENTOR(S): Mera, Hiroshi; Nishihara, Toshio; Endo, Zenichiro
 PATENT ASSIGNEE(S): Agency of Industrial Sciences and Technology, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62006916	A2	19870113	JP 1985-144578	19850703
US 4749753	A	19880607	US 1986-880828	19860701
PRIORITY APPLN. INFO.:			JP 1985-144576	A 19850703
			JP 1985-144577	A 19850703
			JP 1985-144578	A 19850703
			JP 1985-163057	A 19850725

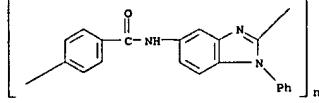
AB The title fibrids for manufacture of heat-resistant tough paper substitutes are prepared by spinning or extruding liqs. containing polymers with high rigidity and heat-bondable matrix polymers into a coagulating bath, drawing the fibers or films, and then pulverizing them. Thus, a mixture of 20.0 parts poly(p-phenylenebenzobisthiazole) and 20.0 parts poly(m-phenyleneisophthalamide-terephthalimide) in 2600 parts methanesulfonic acid was spun into a coagulating bath, drawn 30% in H₂O, washed, dried, drawn 10% at 450°, and fibrillated in a beater to give fibrids. A slurry containing these fibrids was fed to a papermaking machine and pressed

15 h at 310° to give a heat-resistant paper substitute with high bending strength.

IT 26615-36-1
 RL: USES (Uses)
 (fiber, biconstituent with polyazole fibers, fibrids for paper substitutes)

RN 26615-36-1 CAPLUS

CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)iminocarbonyl-1,4-phenylene] (9CI) (CA INDEX NAME)



L3 ANSWER 51 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

ACCESSION NUMBER: 1987:198027 CAPLUS
 DOCUMENT NUMBER: 106:198027

TITLE: Heat-resistant heat-bondable synthetic fibrid manufacture

INVENTOR(S): Mera, Hiroshi; Nishihara, Toshio; Endo, Zenichiro
 PATENT ASSIGNEE(S): Agency of Industrial Sciences and Technology, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

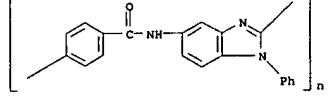
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62006915	A2	19870113	JP 1985-144576	19850703
US 4749753	A	19880607	US 1986-880828	19860701
PRIORITY APPLN. INFO.:			JP 1985-144576	A 19850703
			JP 1985-144577	A 19850703
			JP 1985-144578	A 19850703
			JP 1985-163057	A 19850725

AB The title fibrids for heat-resistant paper substitutes are prepared by wet spinning together polymers with high rigidity and heat-bondable polymers and then fibrillating the fibers by shearing. Thus, a mixture of 20.0 g poly(p-phenylenebenzobisthiazole) and 20.0 g poly(m-phenyleneisophthalamide-terephthalimide) in 2.6 kg methanesulfonic acid was spun into a coagulating bath, sheared in a mixer, and washed to give fibrids. A slurry containing these fibrids was fed to a papermaking machine and pressed 15 h at 310° to give a heat-resistant paper substitute with ratio of tensile strength in MPa to modulus in GPa 35:15.

IT 26615-36-1
 RL: USES (Uses)
 (fiber, biconstituent with synthetic fibers, fibrids, heat-resistant)

RN 26615-36-1 CAPLUS

CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)iminocarbonyl-1,4-phenylene] (9CI) (CA INDEX NAME)



L3 ANSWER 54 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1986:69622 CAPLUS

DOCUMENT NUMBER: 104:69622

TITLE: Diethynylated phenylbenzimidazole compounds

INVENTOR(S): Lau, Kreisler S. Y.

PATENT ASSIGNEE(S): Hughes Aircraft Co., USA

SOURCE: U.S. 8 pp.

CODEN: USXXAM

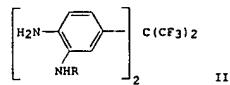
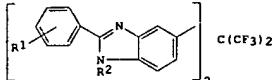
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4537974	A	19850827	US 1984-655009	19840926
US 4587315	A	19860506	US 1985-735926	19850520
PRIORITY APPLN. INFO.:			US 1984-655009	A3 19840926

OTHER SOURCE(S): MARPAT 104:69622
GI

AB Title compds. I (R1 = 3-, or 4-HC.tplbond.C, R2 = Ph or 4-PhOC6H4), useful for the manufacture of poly(phenylbenzimidazoles) which are stable at >300°, are prepared by cyclization of diamines II (R = Ph or 4-PhOC6H4) with 3- or 4-(trimethylsilylethynyl)benzaldehyde followed by reaction with anhydrous K2CO3 in anhydrous MeOH. Thus, adding 90 mL EtOH containing 3.20 g II (R = 4-PhOC6H4) (III) in 1.5 h to 150 mL 50% aqueous EtOH containing 4.75 g Na2S2O5 and 2.04 g 3-(Me3SiC.tplbond.C)C6H4CHO (prepared by ethynylation of 3-BzC6H4CHO with Me3SiC.tplbond.CHI) at 80-85° with stirring, adding 50 mL EtOH, and stirring 40 h at 85-90° gave an intermediate which was reacted 24 h at 25° with 40 mL anhydrous MeOH containing 1 g anhydrous K2CO3 to give 12.5% (based on III) I (R1 = 3-CH.tplbond.C, R2 = 4-PhOC6H4) (IV). IV exhibited gel times 4, 5, 6.5, and 10.5 min at 210, 170, 160, and 150°, resp., could be processed at >235°, and exhibited slight solubility in Me2CO after 35-45 s

L3 ANSWER 54 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

curing at 261°, very slight solv. in Me2CO after 4 h at

316°, and insol. in Me2CO after 14 h at 320°.

IT 100221-74-7P 100221-75-8P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation);

RACT (Reactant or reagent)

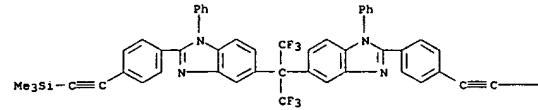
(manufacture and reaction of, with potassium carbonate-methanol mixture)

RN 100221-74-7 CAPLUS

CN 1H-Benzimidazole,

5,5'-(2,2,2-trifluoro-1-(trifluoromethyl)ethylidene)bis[1-phenyl-2-(4-(trimethylsilyl)ethynyl)phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

-- SiMe3

RN 100221-75-8 CAPLUS

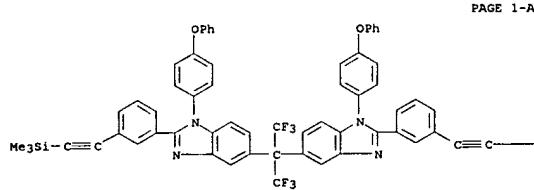
CN 1H-Benzimidazole,

5,5'-(2,2,2-trifluoro-1-(trifluoromethyl)ethylidene)bis[1-(4-phenoxyphenyl)-2-[3-(trimethylsilyl)ethynyl]phenyl]- (9CI) (CA INDEX NAME)

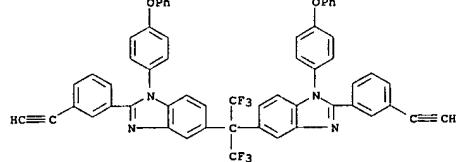
X

L3 ANSWER 54 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L3 ANSWER 54 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



PAGE 1-B



IT 87808-54-6P 87832-48-2P

RL: PEP (Physical, engineering or chemical process); PREP (Preparation);

PROC (Process)

(manufacture of heat-resistant)

RN 87808-54-6 CAPLUS

CN 1H-Benzimidazole,

5,5'-(2,2,2-trifluoro-1-(trifluoromethyl)ethylidene)bis[2-(3-ethynylphenyl)-1-(4-phenoxyphenyl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 87787-96-0

CMF C57 H34 F6 N4 O2

-- SiMe3

IT 87787-95-9P 87787-96-0P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation);

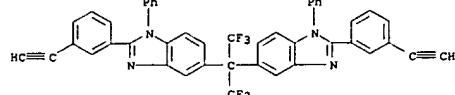
RACT (Reactant or reagent)

(manufacture and thermal polymerization of)

RN 87787-95-9 CAPLUS

CN 1H-Benzimidazole,

5,5'-(2,2,2-trifluoro-1-(trifluoromethyl)ethylidene)bis[2-(3-ethynylphenyl)-1-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)

RN 87787-96-0 CAPLUS
CN 1H-Benzimidazole,
5,5'-(2,2,2-trifluoro-1-(trifluoromethyl)ethylidene)bis[2-(3-ethynylphenyl)-1-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)

RN 87832-48-2 CAPLUS

CN 1H-Benzimidazole,

5,5'-(2,2,2-trifluoro-1-(trifluoromethyl)ethylidene)bis[2-(3-ethynylphenyl)-1-phenyl-, homopolymer (9CI) (CA INDEX NAME)

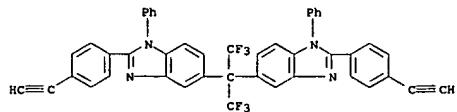
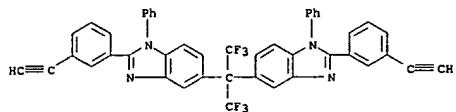
CM 1

CRN 87787-95-9

CMF C45 H26 F6 N4

L3 ANSWER 54 OF 81 CAPIUS COPYRIGHT 2006 ACS on STN (Continued)

L3 ANSWER 54 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



IT 100221-73-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and reaction of, with potassium carbonate-methanol
 mixture)
 RN 100221-73-6 CAPLUS
 CN 1H-Benzimidazole,
 5,5'-(2,2,2-trifluoro-1-((trifluoromethyl)ethyldene)bis[
 1-phenyl-2-[(triethylsilyl)ethynyl]phenyl]) (9CI) (CA INDEX NAME)

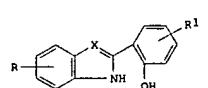
PAGE 1-A

PAGE 1-B

— SiMe₃

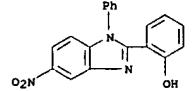
IT 87787-94-8P
 RL: PREP (Preparation)
 (preparation of)
 RN 87787-94-8 CAPLUS
 CN 1H-Benzimidazole,
 5,5'-(2,2,2-trifluoro-1-(trifluoromethyl)ethylidene)bis[
 2-(4-ethynylphenyl)-1-phenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 55 OF 81 CAPIUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1985:178192 CAPIUS
DOCUMENT NUMBER: 103:178192
TITLE: Synthesis of 2-(α -hydroxyphenyl)benzazole derivatives
AUTHOR(S): Skopenko, V. N.; Ol'shevskaya, I. A.; Pochinok, V.
Ya.; Ol'khovik, L. A.
CORPORATE SOURCE: Kiev Gos. Univ., Kiev, USSR
SOURCE: Ukrainskiy Khimicheskiy Zhurnal (Russian Edition)
(1985), 51(3), 316-18
CODEN: UKZHAU; ISSN: 0041-6045
DOCUMENT TYPE: Journal
LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 103:178192
GI



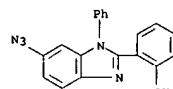
AB The title compds. I (X = NPh, NH, O, S; R = 5-, 6-NO₂, 5-, 6-NH₂, H; R1 = H, 3-, 5-NH₂, 5-NO₂, H) were prepared in 17-96% yields by cyclocondensation of salicylic acids and salicylaldehydes with appropriate diamines, aminophenols, and aminothiophenols. Diazotization of the amino derivs. followed by treatment with NaN₃ gave the corresponding azides I (R, R1 = N3).
 IT 98792-60-0P 98792-66-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 98792-60-0 CAPLUS
 CN Phenol, 2-(5-nitro-1-phenyl-1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)

Ph
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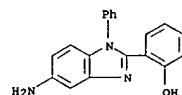


RN 98792-66-6 CAPLUS
CN Phenol, 2-(6-azido-1-phenyl-1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)

L3 ANSWER 55 OF 81 CAPIUS COPYRIGHT 2006 ACS on STN (Continued)



IT 98792-61-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation): RACT
 (Reactant or reagent)
 (preparation, diazotization, and reaction with sodium azide)
 RN 98792-61-1 CAPLUS
 CN Phenol, 2-(5-amino-1-phenyl-1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



A faint, horizontal, slightly curved line with a small vertical tick mark near the right end.

L3 ANSWER 56 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1985:176586 CAPLUS

DOCUMENT NUMBER: 102:176586

TITLE: Diazo heat-sensitive recording material

INVENTOR(S): Suguro, Yoshihiro; Nagamoto, Masanaka

PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan

SOURCE: Ger. Offen. 37 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3413121	A1	19841011	DE 1984-3413121	19840406
DE 3413121	C2	19870108		
JP 59185691	A2	19841022	JP 1983-60501	19830406
US 4542394	A	19850917	US 1984-595023	19840330
			JP 1983-60501	A 19830406

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 102:176586

AB Heat-sensitive recording materials of the diazo type, which show both improved storage stability and thermal response, are composed of a support coated with a layer containing ≥ 1 diazonium compound and a layer containing a coupler and a benzimidazole derivative. The materials are especially useful for recording the output of computers, facsimile devices, and medical anal. instruments. Thus, a high quality paper subbed with a layer containing CaCO_3 and poly(vinyl alc.) (2.0 g/m²) was coated with a ball-milled dispersion containing 2,5-diethoxy-4-(*p*-methylphenylthio)benzenediazonium tetrafluoroborate 0.35, stearamide 1.0, vinyl acetate-vinyl chloride copolymer 2.0, and Me cellosolve 30.65 parts at 3.35 g/m² (solids) and then coated with a ball-milled dispersion containing

1-benzimidazolone

1.0, Naphthol AS 0.7, SiO_2 0.5, Me cellulose 0.5, and water 19.3 parts to give a recording material which was then calendered to a Bekk smoothness of 400 s. The resultant material was then recorded on a Rifax 300 facsimile device, and optically fixed in a diazo copier to give clear

blue

images with an image d. of 1.07 and background d. of 0.10. After storage of this material at 40° and 90% relative humidity for 24 h, the background d. was 0.16.

IT 96048-82-7

RL: USES (Uses)
(thermal recording material containing diazo compound and,

photofixable

RN 96048-82-7 CAPLUS

CN 1H-Benzimidazole, 5-methyl-1-(4-methylphenyl)-2-phenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 57 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1983:595490 CAPLUS

DOCUMENT NUMBER: 99:195490

TITLE: Ethynylated N-phenylbenzimidazoles: synthesis and thermal properties

AUTHOR(S): Lau, K. S. Y.; Kelleghan, W. J.; Boschan, R. H.; Bilow, N.

CORPORATE SOURCE: Technol. Support Div., Hughes Aircr. Co., El Segundo, CA, 90245, USA

SOURCE: Journal of Polymer Science, Polymer Chemistry Edition (1983), 21(10), 3009-26

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Three diethynylated bisbenzimidazole prepolymers were synthesized and their polymerization characteristics examined. N-Phenyl-substituted diethynylated

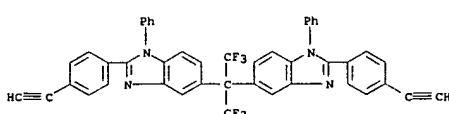
bisbenzimidazole melted at 250-265° and had gel times of several seconds to several min. In contrast, an N-phenoxypyhenyl diethynylated bisbenzimidazole melted at a temperature sufficiently low (apprx.150°) to provide a 5-min gel time at 170° and a 4-min gel time at 210°. A brief screening of the latter prepolymer as a laminating resin was performed. The polymers of both N-phenyl- and N-phenoxypyhenyl-substituted diethynylated bisbenzimidazole showed degradation temps. of $\geq 500^\circ$ in thermal gravimetric anal.

IT 87787-94-87 87787-95-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and thermal polymerization of)

RN 87787-94-8 CAPLUS

CN 1H-Benzimidazole, 5,5'-(2,2,2-trifluoro-1-(trifluoromethyl)ethylidene)bis[2-(4-ethynylphenyl)-1-phenyl- (9CI) (CA INDEX NAME)

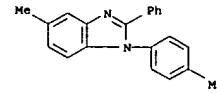


RN 87787-95-9 CAPLUS

CN 1H-Benzimidazole, 5,5'-(2,2,2-trifluoro-1-(trifluoromethyl)ethylidene)bis[2-(3-ethynylphenyl)-1-phenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 56 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

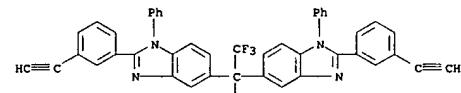
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L3 ANSWER 57 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

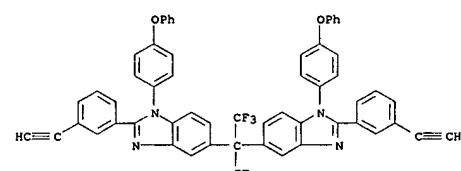
(Continued)



RN 87787-96-0 CAPLUS

CN 1H-Benzimidazole, 5,5'-(2,2,2-trifluoro-1-(trifluoromethyl)ethylidene)bis[2-(3-ethynylphenyl)-1-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)

X



IT 87808-54-6P 87832-40-2P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and thermal properties of)

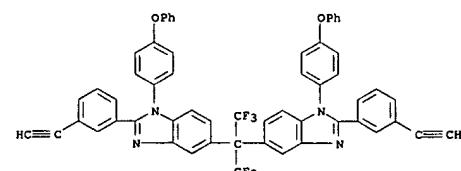
RN 87808-54-6 CAPLUS

CN 1H-Benzimidazole, 5,5'-(2,2,2-trifluoro-1-(trifluoromethyl)ethylidene)bis[2-(3-ethynylphenyl)-1-(4-phenoxyphenyl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 87787-96-0

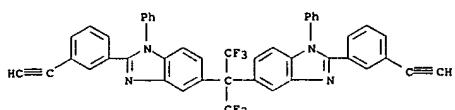
CNP C57 H34 F6 N4 O2



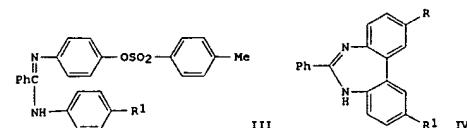
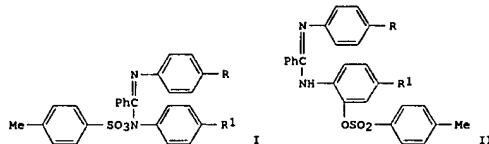
T

L3 ANSWER 57 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 87932-48-2 CAPLUS
 CN 1H-Benzimidazole,
 5,5'-(2,2,2-trifluoro-1-(trifluoromethyl)ethylidene)bis[
 2-(3-ethynylphenyl)-1-phenyl-, homopolymer (9CI) (CA INDEX NAME)
 CM 1
 CRN 87787-95-9
 CMF C45 H26 F6 N4

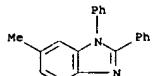


L3 ANSWER 58 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1983:437796 CAPLUS
 DOCUMENT NUMBER: 99:37796
 TITLE: Memory effect and 1,3-diazepine ring closure in arylnitrenium ions
 AUTHOR(S): Binding, Norbert; Heesing, Albert
 CORPORATE SOURCE: Org. Chem. Inst., Univ. Muenster, Muenster, D-4400, Fed. Rep. Ger.
 SOURCE: Chemische Berichte (1983), 116(5), 1822-33
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 OTHER SOURCE(S): CASREACT 99:37796
 GI



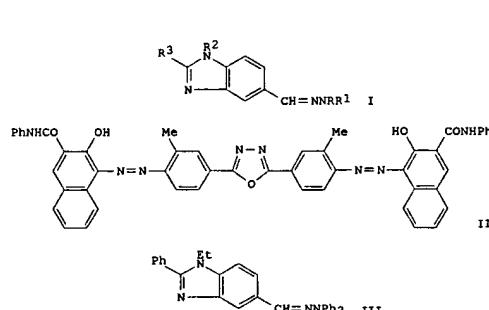
AB 15N- and 18O-labeling expts. demonstrated that in the aromatic rearrangements
 I (R = H, Me, NO₂; R1 = H, NO₂) \rightarrow II \rightarrow III a strong memory effect occurs in oriented contact ion pairs. The formation of IV by cyclization between 2 ortho positions of the aryl substituents is described.
 IT 86318-02-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 RN 86318-02-7 CAPLUS
 CN 1H-Benzimidazole, 6-methyl-1,2-diphenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 58 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



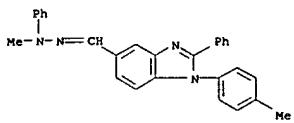
L3 ANSWER 59 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1983:135204 CAPLUS
 DOCUMENT NUMBER: 98:135204
 TITLE: Electrophotographic photosensitive materials
 PATENT ASSIGNEE(S): Copyco Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57099648	A2	19820621	JP 1980-175250	19801213
JP 62055781	B4	19871120		
US 4391889	A	19830705	US 1981-323880	19811123
GB 2093231	A	19820811	GB 1981-35529	19811125
GB 2093231	B2	19841017		
DE 3148961	A1	19820729	DE 1981-3148961	19811210
DE 3148961	C2	19890720		
PRIORITY APPLN. INFO.:				JP 1980-175250 A 19801213
OTHER SOURCE(S):	MARPAT 98:135204			
GI				

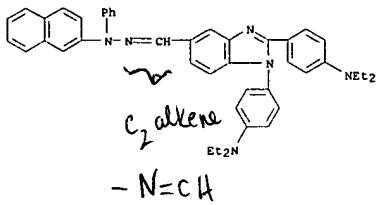


AB Electrophotog. photosensitive materials contain charge-transfer agent of the formula (I: R₁, R₂ = alkyl, aralkyl, aryl; R₃ = aralkyl, aryl; R₄ = aryl). Thus, an Al support was coated with a composition containing II and a poly(vinyl butyral) resin, and coated with a composition containing III and a polycarbonate resin to give a composite electrophotog. plate having good sensitivity.
 IT 84980-32-5 84994-78-5
 RL: TEM (Technical or engineered material use); USES (Uses)

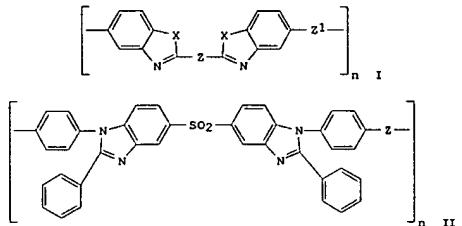
L3 ANSWER 59 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 (electrophotog. charge-transfer agent)
 RN 84980-32-5 CAPLUS
 CN 1H-Benzimidazole-5-carboxaldehyde, 1-(4-methylphenyl)-2-phenyl-, methylphenylhydrazone (9CI) (CA INDEX NAME)



RN 84994-78-5 CAPLUS
 CN 1H-Benzimidazole-5-carboxaldehyde, 1,2-bis[4-(diethylamino)phenyl]-, 2-naphthalenylphenylhydrazone (9CI) (CA INDEX NAME)

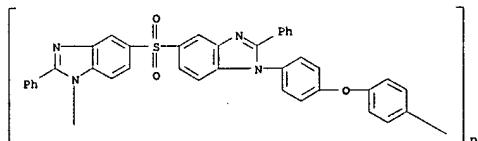


L3 ANSWER 60 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 (electrophotog. charge-transfer agent)
 ACCESSION NUMBER: 1981:66132 CAPLUS
 DOCUMENT NUMBER: 94:66132
 TITLE: Reductive polyheterocyclization - a new general
 method for the synthesis of polybenzazoles
 AUTHOR(S): Korshak, V. V.; Rusanov, A. L.; Tugushi, D. S.; Kipiani, L. G.; Dzhaparidze, Z. Sh.; Shubashvili, A. S.; Gverdtsiteli, I. M.
 CORPORATE SOURCE: Tbilisi. Gos. Univ., Tbilisi, USSR
 SOURCE: Izvestiya Akademii Nauk Gruzinskoi SSR, Seriya Khimicheskaya (1980), 6(2), 122-8
 DOCUMENT TYPE: CODEN: IGSKDH; ISSN: 0132-6074
 LANGUAGE: Journal Russian
 GI

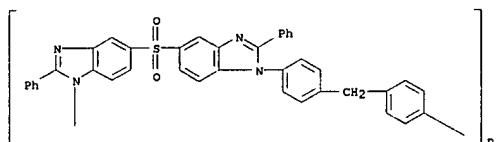


AB The title reaction was used for the preparation of polybenz(ox)imidazoles (I, X = N, O; Z = m-C6H4, p-C6H4OC6H4-p; Z1 = O, CH2, CMe2), and polybenzimidazoles (II, Z = O, CH2). I were prepared by reacting bis(o-nitro amines) or bis(o-nitrophenols) with dicarboxylic acid chlorides, followed by reduction of the resulting poly(o-nitroamides) or poly(o-nitro esters) with Fe-HCl resulting in simultaneous cyclization. II were prepared by reacting bis(anilines) with 4,4'-sulfonylbis[1-chloro-2-nitrobenzene], reduction of the resulting poly(o-nitroamines), acylation with benzoyl chloride (98-88-4), and cyclization. Properties of I and II, and advantages of reductive polyheterocyclization over the previously employed method utilizing bis(o-diamines) were discussed.
 IT 67178-25-0P 71981-14-1P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and properties of)

L3 ANSWER 60 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 RN 67178-25-0 CAPLUS
 CN Poly[(2-phenyl-1H-benzimidazole-1,5-diyl)sulfonyl(2-phenyl-1H-benzimidazole-5,1-diyl)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)



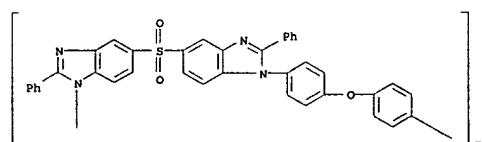
RN 71981-14-1 CAPLUS
 CN Poly[(2-phenyl-1H-benzimidazole-1,5-diyl)sulfonyl(2-phenyl-1H-benzimidazole-5,1-diyl)-1,4-phenylenemethylenemethylene-1,4-phenylene] (9CI) (CA INDEX NAME)



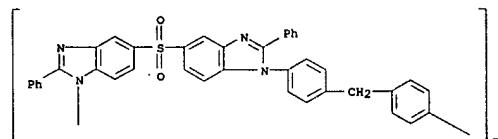
L3 ANSWER 61 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1979:593668 CAPLUS
 DOCUMENT NUMBER: 91:193668
 TITLE: Synthesis of poly(1,2-diarylbenzimidazoles) by modified reductive polyheterocyclization
 AUTHOR(S): Rusanov, A. L.; Tugushi, D. S.; Shubashvili, A. S.; Gverdtsiteli, I. M.; Korshak, V. V.
 CORPORATE SOURCE: Tbilisi. Gos. Univ., Tbilisi, USSR
 SOURCE: Vysokomolekulyarnye Soedineniya, Seriya A (1979), 21(8), 1973-7
 DOCUMENT TYPE: CODEN: VYSAAF; ISSN: 0507-5475
 LANGUAGE: Journal Russian

AB The title polymers were prepared by polymerization of bis(4-halo-3-nitrophenyl)sulfones with aromatic diamines, reduction to poly(o-amino)amines, benzoylation, and thermal cyclization. Optimal reaction conditions, properties of polymers and intermediates, and the influence of diamine structure on polymer properties were determined. The products were thermally stable to 450-900 °C (5% weight loss in air).
 IT 67178-25-0P 71981-14-1P 71981-15-2P 72028-01-4P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and properties of)

RN 67178-25-0 CAPLUS
 CN Poly[(2-phenyl-1H-benzimidazole-1,5-diyl)sulfonyl(2-phenyl-1H-benzimidazole-5,1-diyl)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)



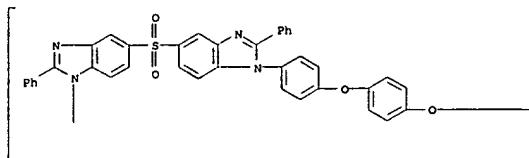
RN 71981-14-1 CAPLUS
 CN Poly[(2-phenyl-1H-benzimidazole-1,5-diyl)sulfonyl(2-phenyl-1H-benzimidazole-5,1-diyl)-1,4-phenylenemethylenemethylene-1,4-phenylene] (9CI) (CA INDEX NAME)



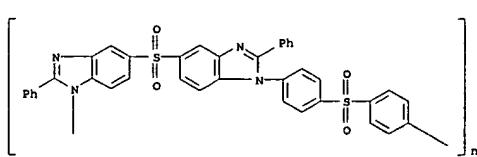
L3 ANSWER 61 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 71981-15-2 CAPLUS
 CN Poly[(2-phenyl-1H-benzimidazole-1,5-diyl)sulfonyl(2-phenyl-1H-benzimidazole-5,1-diyl)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



L3 ANSWER 61 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

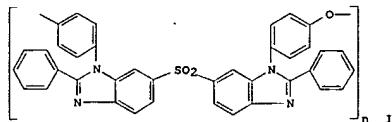


PAGE 1-B

RN 72028-01-4 CAPLUS
 CN Poly[(2-phenyl-1H-benzimidazole-1,5-diyl)sulfonyl(2-phenyl-1H-benzimidazole-5,1-diyl)-1,4-phenylenesulfonyl-1,4-phenylene] (9CI) (CA INDEX NAME)

L3 ANSWER 62 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1978:510475 CAPLUS
 DOCUMENT NUMBER: 89:110475
 TITLE: Synthesis and study of poly[(1,2-diaryl)benzimidazoles]
 AUTHOR(S): Korshak, V. V.; Rusanov, A. L.; Gverdtsiteli, I. M.; Tugushi, D. S.; Shubashvili, A. S.
 CORPORATE SOURCE: Inst. Elementoorg. Soedin., Moscow, USSR
 SOURCE: Doklady Akademii Nauk SSSR (1978), 240(2), 346-8
 [Chem. Abstr.]
 DOCUMENT TYPE: CODEN: DANKAS; ISSN: 0002-3264
 LANGUAGE: Journal
 Russian
 GI



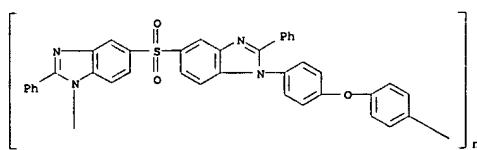
AB Polybenzimidazole I [67178-25-0] was prepared by a modified reductive polyheterocyclization that included polycondensation of 4,4'-diaminodiphenyl ether with 4,4'-dichloro-3,3'-dinitrodiphenyl sulfone, reduction of the resulting polymer [56899-96-8] with Fe-HCl to poly(o-amino amine) [62721-12-4], acylation of the latter with benzoyl chloride [98-88-4], and cyclization of poly(o-benzamido amine) [67178-26-1] to I in the presence of HCl. The yield of I was quant. The structures of I and of the intermediates was supported by IR spectra. I was soluble in dipolar aprotic solvents (N-methyl-2-pyrrolidinone, DMF, etc.), H2SO4, F3CCO2H, etc., giving highly concentrated solns. (>25%).

Films of I cast from DMF solns. had tensile strength 1100 kg/cm² and elongation at break 15%. I softened at 300° and, according to dynamic thermogravimetry in air, lost 10% of its weight at 450°.

IT 67178-25-0
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and properties of)

RN 67178-25-0 CAPLUS
 CN Poly[(2-phenyl-1H-benzimidazole-1,5-diyl)sulfonyl(2-phenyl-1H-benzimidazole-5,1-diyl)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)

L3 ANSWER 62 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L3 ANSWER 63 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1978:105094 CAPLUS

DOCUMENT NUMBER: 88:105094

TITLE: Reaction of 3-acetyl-2,5-dianilino-1,4-benzoquinone and N1-phenylbenzimidazole: a synthesis of quinolinequinones

AUTHOR(S): Schaeffer, Wolfram; Falkner, Christine

CORPORATE SOURCE: Max-Planck-Inst. Biochem., Martinsried, Fed. Rep.

Ger.

SOURCE: Justus Liebigs Annalen der Chemie (1977), (9),

1445-56

DOCUMENT TYPE: CODEN: JLACBF; ISSN: 0075-4617

JOURNAL

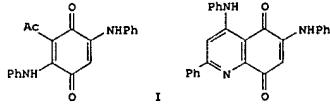
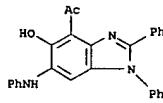
LANGUAGE: German

OTHER SOURCE(S): CASREACT 88:105094

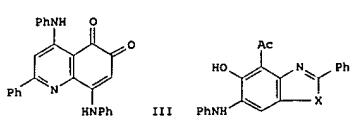
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L3 ANSWER 63 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

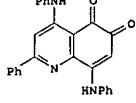
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I



II



III

IV

AB Benzoquinone I reacted with PhC(:NH)NPh to give 49% quinolinequinone II, 2.6% quinolinequinone III, 4% benzoxazole IV (X = O), and benzimidazole

IV

(X = NPh).

IT 65908-26-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 65908-26-1 CAPLUS

CN Ethanone,

1-[5-hydroxy-1,2-diphenyl-6-(phenylamino)-1H-benzimidazol-4-yl]-

(9CI) (CA INDEX NAME)

L3 ANSWER 64 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1977:444211 CAPLUS

DOCUMENT NUMBER: 67:44211

TITLE: Interaction between polymeric materials and tissue

AUTHOR(S): Kojima, Kohichi; Imai, Yohji; Masuhara, Eiichi

CORPORATE SOURCE: Inst. Med. Dent. Eng., Tokyo Med. Dent. Univ., Tokyo,

Japan

SOURCE: Kobunshi Ronbunshu (1977), 34(4), 267-73

DOCUMENT TYPE: CODEN: KBRBA3; ISSN: 0386-2186

LANGUAGE: Japanese

AB Polymers for medical use (polyesters, polyimides, poly(vinyl chloride) [9002-86-2] and silicone rubber) were implanted s.c. into dogs or were immersed in a buffer solution (pH 7.4) at 37° for 26 months. No changes were observed in both treatments as determined by differential interference microscopy, x-ray diffractometry, viscometry and IR spectroscopy. However, some additives were released by the poly(vinyl chloride) preps.

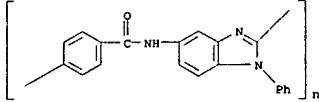
IT 26615-36-1

RL: PRP (Properties)

(stability of, as prosthetics, in tissues)

RN 26615-36-1 CAPLUS

CN Poly(1-phenyl-1H-benzimidazole-2,5-diyl)iminocarbonyl-1,4-phenylene) (9CI) (CA INDEX NAME)



n

L3 ANSWER 65 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1976:31072 CAPLUS

DOCUMENT NUMBER: 84:31072

TITLE: 1-Aryl-2-(p-aminophenyl)-5-aminobenzimidazoles

INVENTOR(S): Smolenkova, L. A.; Rudaya, L. I.; Kvitsko, I. Ya.; El'tsov, A. V.

PATENT ASSIGNEE(S): Lensovet Technological Institute, USSR

SOURCE: U.S.S.R. From: Otkrytiya, Izobret., Prom. Obraztsy, Tovarnye Znaki 1975, 52(36), 63.

CODEN: URXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 496018	T	19750930	SU 1973-1980999	19731229
PRIORITY APPLN. INFO.:			SU 1973-1980999	A 19731229

GI For diagram(s), see printed CA Issue.

AB Title compds. I (R = Ph, α -ClOH7, β -anthraquinonyl) were prepared by acylating 2,4-H2N(O2N)C6H3NHR with 4-O2NC6H4COCl at 165-70°, followed by reductive cyclization of the resulting anilides with SnCl2 in HCl.

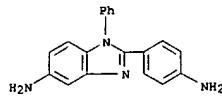
IT 57842-33-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 57842-33-8 CAPLUS

CN 1H-Benzimidazol-5-amine, 2-(4-aminophenyl)-1-phenyl- (9CI) (CA INDEX NAME)



L3 ANSWER 66 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1975-429029 CAPLUS

DOCUMENT NUMBER: 83-29029

TITLE: Selective permeable membranes

INVENTOR(S): Senoo, Masao; Hara, Shigeyoshi; Taketani, Yutaka

PATENT ASSIGNEE(S): Teijin Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 50003970	A2	19750116	JP 1973-49670	19730507
JP 55048841	B4	19801209		
PRIORITY APPLN. INFO.:			JP 1973-49670	A 19730507

AB Selective permeable membranes were prepared by casting of poly(N-arylbenzimidazole amide) solns. For example, 3-amino-4-anilino-N-phenylbenzoic acid (55296-17-8) and isophthaloyl chloride (99-63-8) in N-methylpyrrolidone were heated at 120° for 1.5 hr to give 2,2'-(1-phenylbenzimidazole-5-carboxylic acid) (I) (48230-49-9). A solution of 27.5 g I in 60 ml N-methylpyrrolidone at 150° was treated with 13 g 4,4'-diphenylmethane diisocyanate over 15 min, heated at the same temperature for 3 hr, and diluted with N-methylpyrrolidone to a 15% solution. The 4,4'-diphenylmethane diisocyanate-2,2'-(1-phenylene)bis[1-phenylbenzimidazole-5-carboxylic acid] polymer (41377-01-9) solution (20 g) was mixed with 0.9 g LiCl, filtered through a filter with pore size 5μ, cast, dried at 130° for 15 min (residual solvent 70%), and immersed in water to give 95μ-thick membrane for reverse osmosis. 4,4'-Diphenylmethane diisocyanate-isophthalic acid-2,2'-(p-phenylene)bis(1-phenylbenzimidazole-5-carboxylic acid) polymer (55295-60-8) membrane was also prepared

IT 41365-95-1 41377-01-9 55295-60-8

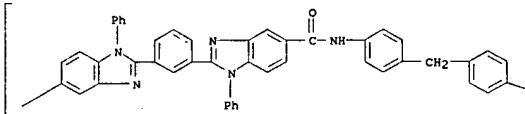
RL: USES (Uses)

(membranes, for reverse osmosis)

RN 41365-95-1 CAPLUS

CN Poly[(1-phenyl-1H-benzimidazole-5,2-diyl)-1,3-phenylene(1-phenyl-1H-benzimidazole-2,5-diyl)carbonylimino-1,4-phenyleneimino] (9CI) (CA INDEX NAME)

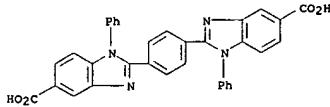
PAGE 1-A



L3 ANSWER 66 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CRN 54545-65-2

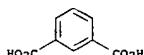
CMF C34 H22 N4 O4



CM 2

CRN 121-91-5

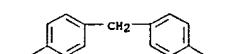
CMF C8 H6 O4



CM 3

CRN 101-68-8

CMF C15 H10 N2 O2



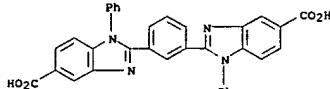
IT 40238-49-92

RL: PREP (Preparation)

(preparation of)

RN 40238-49-9 CAPLUS

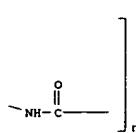
CN 1H-Benzimidazole-5-carboxylic acid, 2,2'-(1,3-phenylene)bis[1-phenyl- (9CI) (CA INDEX NAME)



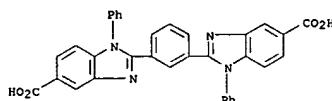
L3 ANSWER 66 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-B

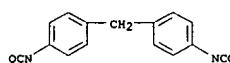
[

RN 41377-01-9 CAPLUS
CN 1H-Benzimidazole-5-carboxylic acid, 2,2'-(1,3-phenylene)bis[1-phenyl- polymer with 1,1'-methylenebis[4-isocyanatobenzene] (9CI) (CA INDEX NAME)

CM 1

CRN 40238-49-9
CMF C34 H22 N4 O4

CM 2

CRN 101-68-8
CMF C15 H10 N2 O2RN 55295-60-8 CAPLUS
CN 1,3-Benzenedicarboxylic acid, polymer with 1,1'-methylenebis[4-isocyanatobenzene] and 2,2'-(1,4-phenylene)bis[1-phenyl-1H-benzimidazole-5-carboxylic acid] (9CI) (CA INDEX NAME)

CM 1

L3 ANSWER 67 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1975-171702 CAPLUS

DOCUMENT NUMBER: 62-171702

TITLE: Poly(benzimidazole hydrazides)

INVENTOR(S): Hara, Shigeyoshi; Senoo, Masao; Taketani, Yutaka

PATENT ASSIGNEE(S): Teijin Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 50002095	A2	19750110	JP 1973-50615	19730509
PRIORITY APPLN. INFO.:			JP 1973-50615	A 19730509

GI For diagram(s), see printed CA Issue.

AB Dibenzimidazole dicarboxylic acid dihydrazides(I-III) with dicarboxylic acid chlorides at -30 to +80° gave hydrophilic polymers. Thus 5.78 g I and 2.03 g p-C6H4(COCl)2 in 35 ml 1-methylpyrrolidinone(IV) were kept 0.5 hr at -10° and 3 hr at room temperature to give 2,2'-(1,3-phenylene)bis[1-phenyl-5-benzimidazolecarboxylic acid hydrazide]-terephthaloyl chloride polymer (V) (55185-47-2), intrinsic viscosity 0.64 (0.5 g/100 ml IV at 25°). V in IV containing 2% LiCl was cast as a film which showed 45% water absorption when dipped in water at room temperature.

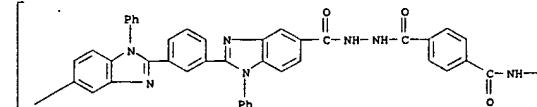
IT 55172-42-49 55185-47-2P

RL: IMP (Industrial manufacture); PREP (Preparation) (manufacture of, hydrophilic)

RN 55172-42-4 CAPLUS

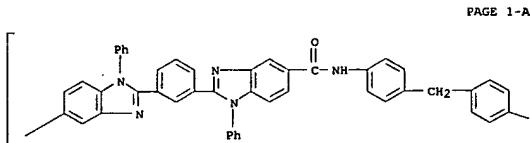
CN Poly[(1-phenyl-1H-benzimidazole-5,2-diyl)-1,3-phenylene(1-phenyl-1H-benzimidazole-2,5-diyl)carbonylhydrazocarbonyl-1,4-phenylenecarbonylhydrazocarbonyl] (9CI) (CA INDEX NAME)

PAGE 1-A

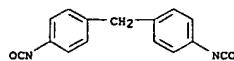


X

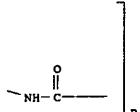
L3 ANSWER 69 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L3 ANSWER 69 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

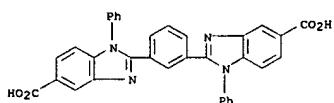


PAGE 1-B



RN 41377-01-9 CAPLUS
 CN 1H-Benzimidazole-5-carboxylic acid, 2,2'-(1,3-phenylene)bis(1-phenyl-, polymer with 1,1'-methylenebis(4-isocyanatobenzene) (9CI) (CA INDEX NAME)

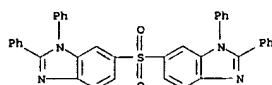
CM 1

CRN 48238-49-9
CMF C34 H22 N4 O4

CM 2

CRN 101-68-8
CMF C15 H10 N2 O2

L3 ANSWER 70 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1973:136162 CAPLUS
 DOCUMENT NUMBER: 78:136162
 TITLE: Synthesis and study of N-phenyl-substituted
 bibenzimidazoles
 AUTHOR(S): Korshak, V. V.; Rusanov, A. L.; Tugushi, D. S.;
 Leont'eva, S. N.
 CORPORATE SOURCE: Inst. Elementoorg. Soedin., Moscow, USSR
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1973), (2),
 252-5
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB: N-Phenylbibenzimidazoles (I; Q = p-C6H4, m-C6H4, 4,4'-(c6H4)2, ,6-C10H6,
 4,4'-(C6H4SO2C6H4) were prepared in 65-80% yields by treatment of
 o-H2NC6H4NHPH with Q(COCl)2 to give 70-90% dianilides Q(COONHC6H4NHPH-o)2,
 which were then cyclized. Similarly prepared were 70%
 benzodimidazoles (II) and bibenzimidazoles (III; X = SO2, bond).
 IT 39823-41-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 39823-41-1 CAPLUS
 CN 1H-Benzimidazole, 6,6'-sulfonylbis(1,2-diphenyl- (9CI) (CA INDEX NAME)



L3 ANSWER 71 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1973:72645 CAPLUS

DOCUMENT NUMBER: 78:72645

TITLE: Two-stage synthesis of poly(N-phenylbibenzimidazoles)

AUTHOR(S): Korshak, V. V.; Rusanov, A. L.; Tugushi, D. S.;

Cherkasova, G. M.

CORPORATE SOURCE: Inst. Elementoorg. Compds., Moscow, USSR

SOURCE: Macromolecules (1972), 5(6), 807-12

CODEN: MMBOX; ISSN: 0024-9297

DOCUMENT TYPE: Journal

LANGUAGE: English

AB: The low-temperature solution polymerization of

1,3-diamino-4,6-dianilinobenzene (I),
 3,3'-diamino-4,4'-dianilinobiphenyl, and 3,3'-diamino-4,4'-
 dianilinodiphenyl sulfone with various dicarboxylic acid dichlorides gave
 high-mol.-weight poly(o-anilino amides), which were cyclized at
 300-310 deg.

to poly(N-phenylbibenzimidazoles), which were soluble in HCOOH and

tetrachloroethane-PhOH and formed strong films. For example, I and

terephthaloyl chloride gave polyimino(4,6-dianilino-m-phenylene)iminoterephthalamide (II) [31497-73-1], which was cyclized to

Poly([1,7-dihydro-, 7-dimethylbenzo[1,2-d:4,5-d']diimidazole-2,6-diyl]-p-phenylene) (III) [31497-74-2]. Twenty analogous polyamides and their

corresponding polybenzimidazoles were also prepared, and dynamic and

isothermal thermogravimetric anal. curves for 7 of the polybenzimidazoles

were given and discussed. In addition, 20 model compds. were prepared

IT 39823-41-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 39823-41-1 CAPLUS

CN 1H-Benzimidazole, 6,6'-sulfonylbis(1,2-diphenyl- (9CI) (CA INDEX NAME)

IT 39820-51-4P 39820-52-5P 39820-53-6P

39820-56-9P 39820-57-0P

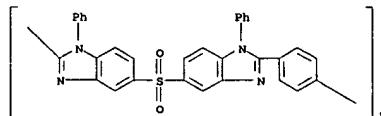
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, by cyclization of poly(o-anilino amides))

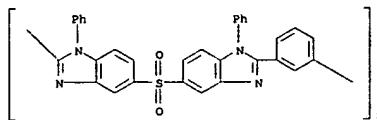
RN 39820-51-4 CAPLUS

CN Poly([1-phenyl-1H-benzimidazole-2,5-diyl]sulfonyl(1-phenyl-1H-

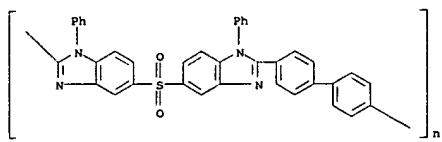
benzimidazole-5,2-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)



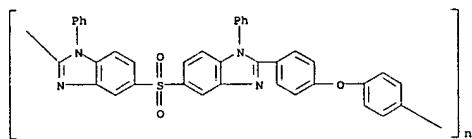
L3 ANSWER 71 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 RN 39820-52-5 CAPLUS
 CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)sulfonyl(1-phenyl-1H-benzimidazole-5,2-diyl)-1,3-phenylene] (9CI) (CA INDEX NAME)



RN 39820-53-6 CAPLUS
 CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)sulfonyl(1-phenyl-1H-benzimidazole-5,2-diyl)(1,1'-biphenyl)-4,4'-diyl] (9CI) (CA INDEX NAME)

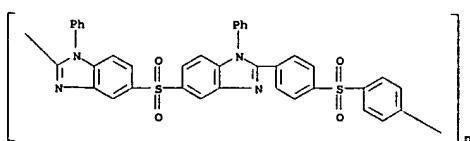


RN 39820-56-9 CAPLUS
 CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)sulfonyl(1-phenyl-1H-benzimidazole-5,2-diyl)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)



RN 39820-57-0 CAPLUS
 CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)sulfonyl(1-phenyl-1H-benzimidazole-5,2-diyl)-1,4-phenylenesulfonyl-1,4-phenylene] (9CI) (CA INDEX NAME)

L3 ANSWER 71 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

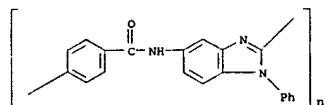


L3 ANSWER 72 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1970:488408 CAPLUS
 DOCUMENT NUMBER: 73:88408
 TITLE: Manufacturing polybenzimidazoles
 INVENTOR(S): Hara, Shigeo; Seo, Masao; Uchida, Moriya
 PATENT ASSIGNEE(S): Teijin Ltd.
 SOURCE: Jpn. Tokkyo Koho, 4 pp.
 CODEN: JAXXAD
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

 JP 45022555 B4 19700730 JP 19671019
 DE 1795319 DE
 FR 1584809 FR
 GB 1216567 GB
 US 3597391 US 19680906
 AB Poly(amide amines) (I) are ring-closed by the heat treatment to give heat-resistant polybenzimidazoles (II), which are soluble in polar organic solvents and useful as fibers and films. E.g., 2.72 g 2,4-diaminodiphenylamine-HCl, 4.24 g Na₂CO₃, 50 ml H₂O, and 42 ml THF (III) are stirred rapidly in blender and the solution is mixed with 2.03 g terephthaloyl chloride in 17 ml III and stirred 10 hr to give I (yellow powder), which is heated 6 hr at 300° in vacuo to give II, which is soluble in HCO₂H, dichloroacetic acid, and m-cresol, and shows thermal stability at 430°.
 IT 26615-36-1
 RL: PREP (Preparation)
 (preparation of)
 RN 26615-36-1 CAPLUS
 CN Poly[(1-phenyl-1H-benzimidazole-2,5-diyl)iminocarbonyl-1,4-phenylene] (9CI) (CA INDEX NAME)



L3 ANSWER 73 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1970:50473 CAPLUS
 DOCUMENT NUMBER: 72:90473
 TITLE: Antiinflammatory substituted 1,2-dihydrobenzimidazoles
 INVENTOR(S): Rohrbach, Philippe; Blum, Jean
 PATENT ASSIGNEE(S): Manufactures J. R. Biotu
 SOURCE: Brit., 8 pp.
 CODEN: BRXXAA
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

 GB 1174493 19691217 GB 1967-32933 19670510
 DE 1770362 DE
 FR 7408 FR

GI For diagram(s), see printed CA Issue.
 AB The title componds, (I), antiinflammatory and analgesic agents of low toxicity, are prepared by oxidative cyclization of II in the presence of PhNO₂. Refluxing 10.5 g 4-MeOC₆H₄CH₂(NH₂)₂-1,2, 6.5 g 4-MeOC₆H₄CHO, and 40 ml MeOH 1 hr gave 10.5 g II (R = H, R₁ = R₂ = 4-MeO) (III), 122°. A solution of 10.5 g III in 10 ml PhNO₂ was refluxed 15 min to give 9.4 g I (R = H, R₁ = R₂ = 4-MeO) (IV), m. 151° EtOH. The following intermediates (II) (oils) and I were similarly prepared (R, R₁, and R₂ in II, and R₁ and R₂ of corresponding I given): 5-MeO, 4-MeO, 4-Me, 160° (iso-PrOH), 50; 4-Me, 4-MeO, 140°, 158° (iso-PrOH), 32; 4-MeO, 4-Me, 163° (AcOEt), 27; H, 4-Me, 4-CI, 187° (MeOH), 35; 4-Me, 4-MeO, 147°, 4-CI, 193° (iso-PrOH), 42; 4-CI, 4-MeO, 147-8°, 4-CI, 193° (iso-PrOH), 57; H, 4-MeO, 4-Me, 136° (iso-PrOH), 77.7; H, 4-MeO, 3-F3C, 144° (EtOH), 30; H, 4-MeO, 3-CI, 192° (EtOH), 50; H, 4-CI, 4-MeO, 158° (iso-PrOH), 79; H, 4-(Et₂NCH₂CH₂O), 4-MeO, 110° (iso-PrOH), 43; 4-F3C, 4-HO, 4-MeO, 256 (iso-PrOH), 10; H, 4-MeO, 2-CI, 152° (iso-PrOH), 47; 5-Me, 4-MeO, 4-MeO, [HCl salt m. 192-3° (decomposition) (iso-PrOH)], H, 2-CI, 4-MeO, [HCl salt m. 200° (decomposition) (EtOH)], 26; H, 2-Me, 4-MeO, 124° (iso-PrOH-petroleum ether), 54; H, 2-Me, 4-Me, 142° (iso-PrOH), 60; H, 2-Me, 4-MeO, 149° (AcOEt), 43; H, 4-CO₂H, 4-Me (m.p. 210°), 268° (AcOEt), 60. Antiinflammatory activity of IV and in the rat was obtained at 15 mg/kg orally while acute oral mouse toxicity (LD₅₀) was absent at 3 g/kg (IV) and 5 g/kg (IV); the human oral dose is 0.1-5 g daily.

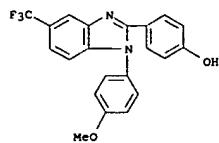
IT 24784-19-7P 24784-23-4P 24784-39-2P
 24784-40-5P 24784-41-6P 24784-43-8P
 24784-44-9P 24802-01-1P 26277-75-8P

26757-16-4P

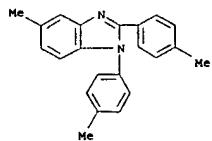
RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 24784-18-7 CAPLUS
 CN Phenol, p-[(p-methoxyphenyl)-5-(trifluoromethyl)-2-benzimidazolyl] (9CI) (CA INDEX NAME)

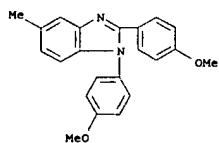
L3 ANSWER 73 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 24784-23-4 CAPLUS
 CN Benzimidazole, 5-methyl-1,2-di-p-tolyl- (8CI) (CA INDEX NAME)

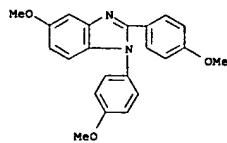


RN 24784-39-2 CAPLUS
 CN Benzimidazole, 1,2-bis(p-methoxyphenyl)-5-methyl- (8CI) (CA INDEX NAME)

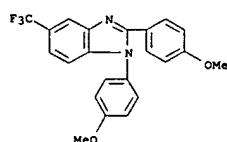


RN 24784-40-5 CAPLUS
 CN Benzimidazole, 5-methoxy-1,2-bis(p-methoxyphenyl)- (8CI) (CA INDEX NAME)

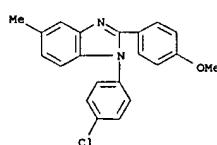
L3 ANSWER 73 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 24784-41-6 CAPLUS
 CN Benzimidazole, 1,2-bis(p-methoxyphenyl)-5-(trifluoromethyl)- (8CI) (CA INDEX NAME)

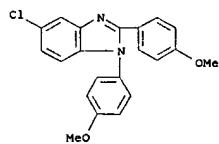


RN 24784-43-8 CAPLUS
 CN Benzimidazole, 1-(p-chlorophenyl)-2-(p-methoxyphenyl)-5-methyl- (8CI) (CA INDEX NAME)

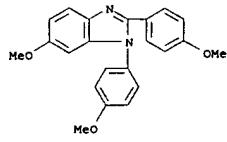


RN 24784-44-9 CAPLUS
 CN Benzimidazole, 5-chloro-1,2-bis(p-methoxyphenyl)- (8CI) (CA INDEX NAME)

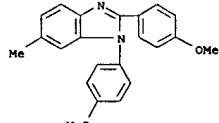
L3 ANSWER 73 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 24802-81-1 CAPLUS
 CN Benzimidazole, 6-methoxy-1,2-bis(p-methoxyphenyl)- (8CI) (CA INDEX NAME)



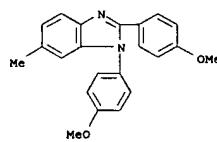
RN 26277-75-8 CAPLUS
 CN Benzimidazole, 1,2-bis(p-methoxyphenyl)-6-methyl-, hydrochloride (8CI) (CA INDEX NAME)



• x HCl

RN 26757-16-4 CAPLUS
 CN Benzimidazole, 1,2-bis(p-methoxyphenyl)-6-methyl- (8CI) (CA INDEX NAME)

L3 ANSWER 73 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



X

L3 ANSWER 76 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

ACCESSION NUMBER: 1963:462387 CAPLUS

DOCUMENT NUMBER: 59:62387

ORIGINAL REFERENCE NO.: 59:11515b-h,11516a-c

TITLE: Materials for electrophotographic reproduction

INVENTOR(S): Sues, Oskar; Tomaneck, Martha; Lind, Erwin

PATENT/ASSIGNEE(S): Kalle A.-G.

PAGES: 17 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1137625	19621004	DE 1958-K35586	19580822	DE 19580822

PRIORITY APPLN. INFO.: GI For diagram(s), see printed CA Issue.

AB Insulated layers are formed from mixts. of organic colloids and photo-conductive thiazole, oxazole, or imidazole compds. 2-(4-Acetamidophenyl)-6-methylbenzothiazole (1 g.), 1 g. "Zinkresinat 357, and 0.02 g. Acid Violet 6 Bt is dissolved in 30 g. glycol

monomethyl ether, coated on paper, and dried. After undergoing a corona discharge, the sensitized paper is exposed under pos. copy to a 100-W. incandescent

bulb for 1/4 sec., dusted with a carbon-colored resin powder and fixed by heating. The substances used are of the formula I where X is a noncondensed aromatic ring, Y is a univalent aromatic or heterocyclic radical, Z is an O or S atom or an amino group in which the H atom is displaced by an alkyl or aryl or aralkyl radical. The following new compds. were prepared by known methods (compound and m.p. given): 2-phenylbenzothiazole, 114; 2-(4-methoxyphenyl)benzothiazole, 134; 2-(4-aminophenyl)benzothiazole, 157; 2-(4-dimethylaminophenyl)benzothiazole, 173; 2-(4-dimethylaminophenyl)benzothiazole, 125; 2-(4-methoxyphenyl)-6-methylbenzothiazole, 125; 2-(4-aminophenyl)-6-methylbenzothiazole, 191; 2-(4-dimethylaminophenyl)-6-methylbenzothiazole, 225; 2-(4-dimethylaminophenyl)-6-methylbenzothiazole, 196-7; 2-(4-dimethylaminophenyl)-6-methylbenzothiazole, 128; 2-(4-dimethylaminophenyl)-6-methylbenzothiazole-N,N-dimethylsulfonamide, 145; 2-(4-dimethylaminophenyl)-6-methylbenzothiazole-N,N-diethylsulfonamide, 145; 2-(3-methoxy-4-hydroxyphenyl)-6-methylbenzothiazole, 213; 2-(3-hydroxy-4-methoxyphenyl)-6-methylbenzothiazole, 138; 2-(2-methoxy-6-hydroxyphenyl)-6-methylbenzothiazole, 164; 2-(3,4-dihydroxyphenyl)-6-methylbenzothiazole, 271; 2-(4-methoxyphenyl)-6-methoxybenzothiazole, 163; 2-(4-dimethylaminophenyl)-6-methoxybenzothiazole, 117; 2-(4-dimethylaminophenyl)-6-methoxybenzothiazole, 182; 2-phenyl-6-dimethylaminobenzothiazole, 135; 2-(4-nitrophenyl)-6-di-methylaminobenzothiazole, 246; 2-(3-nitrophenyl)-6-dimethylaminobenzothiazole, 176; 2-(2-nitrophenyl)-6-dimethylaminobenzothiazole, 147;

L3 ANSWER 76 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

2-(4-dimethylaminophenyl)-6-dimethylaminobenzothiazole, 230";

2-(4-dimethylaminophenyl)-6-dimethylaminobenzothiazole, 151";

2-(3,4-dimethylenedioxophenyl)-6-dimethylaminobenzothiazole, 176";

2-phenylbenzoxazole, 102"; 2-(4-methoxyphenyl)benzoxazole, 99"; 2-(4-dimethylaminophenyl)benzoxazole, 182";

2-(4-dimethylaminophenyl)benzoxazole, 132"; 2-(4-methoxyphenyl)-6-methylbenzoxazole, 91"; 2-(4-dimethylaminophenyl)-6-methylbenzoxazole, 108"; 2-(4-dimethylaminophenyl)-5-chlorobenzoxazole, 179";

2-(4-dimethylaminophenyl)-5-chlorobenzoxazole, 160";

2-(3-methoxy-4-hydroxyphenyl)benzimidazole, 222";

2-(4-dimethylaminophenyl)benzimidazole, 233"; 1-methyl-2-(3,4-dimethylaminophenyl)benzimidazole, 160"; 1-methyl-2-(4-dimethylaminophenyl)benzimidazole, 161"; 1-methyl-2-(4-dimethylaminophenyl)benzimidazole, 124"; 1-methyl-2-(4-hydroxy-1-naphthyl)benzimidazole, 311"; 1-methyl-2-(4-dimethylaminophenyl)-6-methoxybenzimidazole, 180"; 1-methyl-2-(3,4-methylenedioxophenyl)-5-methylbenzimidazole, 149"; 1-methyl-2-(4-dimethylaminophenyl)-5-methylbenzimidazole, 161"; 1-methyl-2-(4-dimethylaminophenyl)-5-nitrobenzimidazole, 149"; 1-methyl-2-(4-methoxyphenyl)-5-nitrobenzimidazole, 238"; 1-methyl-2-(4-dimethylaminophenyl)-5-nitrobenzimidazole, 154"; 1-methyl-2-(4-hydroxyphenyl)-benzimidazole, 129"; 1-phenyl-2-(4-dimethylaminophenyl)benzimidazole, 222"; 1-phenyl-2-(4-dimethylaminophenyl)benzimidazole, 148"; 1-(4-dimethylaminophenyl)-2-(2-hydroxyphenyl)-6-chlorobenzimidazole, 218"; 1-(4-dimethylaminophenyl)-2-(4-dimethylaminophenyl)-6-chlorobenzimidazole, 217"; 1-benzyl-2-(4-hydroxyphenyl)benzimidazole, 233"; 2-(p-dimethylaminophenyl)naphth[2',3':4,5]imidazole, 300"; (decompn) 2-(2-pyridyl)naphth[2',3':4,5]imidazole, 224-5"; 1-methyl-2-(2-hydroxyphenyl)naphth[4,5:1',2']imidazole, 155"; 1-ethyl-2-(4-dimethylaminophenyl)-7-methoxy naphth[4,5:1',2']imidazole, 208"; 2-phenylphenanthrene[9',10':4,5]oxazole, 200-2"; 2-(4-chlorophenyl)phenanthrene[9',10':4,5]oxazole, 256-7"; 2-(4-methoxyphenyl)phenanthrene[9',10':4,5]oxazole, 279-180"; 2-(4-dimethylaminophenyl)phenanthrene[9',10':4,5]oxazole, 260-5"; 2-furylphenanthrene[9',10':4,5]oxazole, 228-30"; 1-methyl-2-(3-pyridyl)-5-methylbenzimidazole, 193"; 1-methyl-2-(1-phenyl)-5-methylbenzimidazole, 114"; 2-(4-aminophenyl)benzimidazole, 109"; 2-(3-nitro-4-dimethylaminophenyl)-6-methylbenzothiazole sulfamoyl deriv., 244"; 2-(4-dimethylaminophenyl)-6-methylbenzothiazole N-methylsulfamoyl deriv., 204"; 2-(4-dimethylaminophenyl)-6-methylbenzothiazole sulfonate acid morpholide, 189". Also prep'd. were II, m. 224, and the SO2NHET deriv. of III, m. 172", yellow.

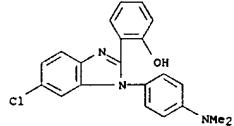
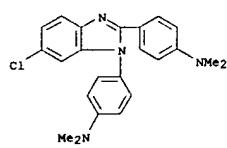
IT 10205-99-9. Phenol, o-(6-chloro-1-[p-(dimethylamino)phenyl]-2-(dimethylamino)phenyl)-

(preparation of)

RN 10205-99-9 CAPLUS

L3 ANSWER 76 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CN Phenol, o-(6-chloro-1-[p-(dimethylamino)phenyl]-2-benzimidazolyl)- (7CI, 8CI) (CA INDEX NAME)

RN 10206-00-5 CAPLUS
CN Benzimidazole, 6-chloro-1,2-bis[p-(dimethylamino)phenyl]- (7CI, 8CI) (CA INDEX NAME)

L3 ANSWER 77 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1961:87461 CAPLUS

DOCUMENT NUMBER: 55:87461

ORIGINAL REFERENCE NO.: 55:16523h-1,16524a-1,16525a-1,16526a-d

TITLE: Search for chemotherapeutic amidines. XVIII. Substituted 4,4'-diaminodiphenylamines

AUTHOR(S): Easson, A. P. T.

CORPORATE SOURCE: May & Baker Ltd., Dagenham, UK

SOURCE: Journal of the Chemical Society (1961) 1029-37

CODEN: JCSDA9; ISSN: 0368-1769

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

AB cf. CA 55, 8344c. A series of 4,4'-diaminodiphenylamines with substituents in the C6H5 rings and (or) on the central amino group was described. Most of the compds. were active against Trypanosoma rhodesiense, but the activity was less against T. congoense. The most active compound was 4,4'-diamino-2-methoxydiphenylamine-2HCl, with a therapeutic ratio of 7:5 against the latter organism. Treatment of 4-amino-3-methylbenzonitrile in C5H5N with BzCl gave 75%

N-benzoyl-4-cyano-2-methylaniline, m. 153" (alc.). N-benzoyl-4-cyano-2-nitroaniline similarly obtained m. 144-6".

A mixture of N-benzoyl-p-cyanoaniline (1 mole), 0.98 mole PC15, and 4 moles CCl4 was refluxed and the solvent and PCOCl removed in vacuo. The residual imidoyl chlorides, readily hydrolyzed by moisture, were not further purified but condensed directly with various p-hydroxybenzonitriles by one of the following processes. (A) p-Hydroxybenzonitrile (1.1 moles) was added to 1 mole NaOEt in alc., 1 mole benzimidoyl chloride (Ia) in Et2O-CHCl3 added, then 0.25 mole anhydrous

Na2CO3, the mixture stirred 1-2 hrs. at 0°, then 3-4 hrs. at room temperature, left overnight, the solid collected, and recrystd. from alc. (B)

The Na salt of 1 mole p-hydroxybenzonitrile in dry C5H5N was mixed with molten Ia, heated a few min. on the steam bath, H2O added, and the oily precipitate crystallized and recrystd. (C) The p-hydroxybenzonitrile (1 mole) and Ia were melted together, 1.5 moles anhydrous NEt3 added, the mixture refluxed 2 hrs., H2O and a slight excess AcOH added; the benzimidates generally separated as oils which soon crystallized. The following

H:CH:C(CN):CH:CR2 (I) were thus obtained (R, R1, R2, process, % yield, and m.p. given): H, Me, H, A, 63, 142.5"; H, Me, H, B, 39,

136-8"; H, Me, H, C, 76, 140.1"; Me, H, H, A, 45,

104.5"; Me, H, H, B, -104-4"; Me, Me, H, A, 79,

125-9"; Me, Me, H, B, 58, 123-6"; Me, Me, H, C, 83,

125.7"; H, Cl, H, A, 25, 135-6"; Me, Cl, H, A, 36,

124"; H, Cl, H, A, 24, 167-8"; H, NO2, H, A, 47,

136"; H, NO2, H, B, 69, 135-6"; H, NO2, H, C, 64,

134-6"; NO2, H, H, A, 78, 192"; NO2, NO2, H, B, 96,

198"; H, OMe, H, C, 60, 147-8". The rearrangement of I to benzoyldiphenylamines (II) was carried out as follows except in 3 cases

of I (R = R2 = H, R = NO2; R = NO2, R1 = R2 = H; and R = R1 = NO2, R2 = H) I were dissolved in an equal weight of Dowtherm and the solution refluxed 1-2 hrs.

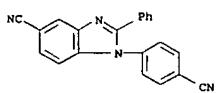
II were isolated by addition of Et2O and crystallized from alc. II (R1 = R2 = H, R

L3 ANSWER 77 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 = Me) was not characterized but was hydrolyzed directly to the corresponding diphenylamine. I (R = R2 = H, R1 = NO2) rearranged smoothly in refluxing anisole and even in refluxing CS5H5N, tar being formed at higher temps. Two I (R = NO2, R1 = R2 = H; R = R1 = NO2, R2 = H) were unaffected at the lower temps. and decompd. at 200°. The following II, HC:CH:C(CN):CH:CR1:CH(CN):CH:CR2, were thus obtained (R, R1, R2, % yield, and m.p. given): H, Me, H, 94, 165-7°; Me, Me, H, 98, 159-60°; H, Cl, Cl, 54, 204-5°; H, NO2, H, 99, 234-7°; H, OMe, H, 88, 152-4°. CR:CH:C(CN):CH:CH:CNHCH:CH:CH:C(CN):CH:CR1 (III) were next. prep'd. Compds. nos. 1-5 (see further) were prep'd. by hydrolysis of the corresponding II. A 10% NaOH soln. in 75% (CH2OH)2 was added in 1 portion to the II compd. in 3-4 parts refluxing ethylene glycol, the mixt. refluxed a few min., and the product pptd. by H2O and recrystd. (AcOH). Compd. no. 6A was prep'd. by hydrolysis of the corresponding II in K2CO3 in ethylene glycol-anisole contg. a little H2O. The product resisted purification but an almost theoretical yield of pure nitro compd. (no. 6B) was obtained as follows.

4,4'-Dicyanodiphenylamine (40 g.) was ground with 200 ml. AcOH, 400 ml. concd. HNO3 added, and after 25 min. H2O added to yield compd. no. 6B, crystd. from anisole; no. 7 (83%) was obtained by addn. of 45 g. reduced Fe to 24 g. 4,4'-dicyano-2-nitrodiphenylamine in 60 ml. refluxing HCONMe2 and 40 ml. AcOH, adding after 0.5 hr. 400 ml. hot H2O, filtering the mixt. and working up the ppt. and the filtrate. Compds. nos. 12-15 were prep'd. by demethylation of 4,4'-dicyano-2-methoxydiphenylamine to give the OH deriv. At the required temp. (197-203°) part of the mixt. tended to sublime, a little Dowtherm was added, after 4 hrs. the mixt. stirred with dil. alc., and the solid dissolved in HCONMe2-dioxane. Any MeO compd. was pptd. by excess 5% NaOH; acidification gave the 2-OH deriv. The other 2-alkoxy halide and K2CO3 in refluxing Me2CO. The following III were thus obtained (no., R, R1, % yield, and m.p. given): (1), Me, H, 85, 222°; (2), Cl, Cl, 60, 211°; (3), Me, Me, 38, 199-201°; (4), Me, Cl, 73, 198°; (5), OMe, H, 86, 145-6°; (6A), NO2, H, 186-91°; (6B), NO2, H, 95, 191°; (7), NH2, H, 93, 238-9°; (8), NHAc, H, 75, 238-40°; (9), HNBz, H, 233-5°; (10), Cl, Cl, 76, 243-4°; (11), OMe, H, 55, 232-3°; (12), OEt, H, 76, 169-70°; (13), OPr, H, 73, 135-6°; (14), OCH2CH:CH2, H, 70, 135-6°; (15), Bu, H, 80, 114-15°. 1,3-Trimethylene bis(p-toluenesulfonate) (86%), m. 95-6°, 1,3-pentamethylene bis(p-toluenesulfonate) (85%), m. 80° (alc.), and 2-hydroxyethyl p-toluenesulfonate, a syrup (phenylurethan m. 135-6°), were prep'd. by the Ag salt method. N-Alkyl derivs. were prep'd. by treating 1 mole 4,4'-dicyanodiphenylamine with 1.2-1.5 moles requisite alkyl p-toluenesulfonate, 1 mole K2CO3, anisole, and a trace of Cu bronze under reflux, the H2O removed, and replaced by anisole, after refluxing 3-4 hrs. the solvent added, the mixt. filtered, the solvent removed, and the residue recrystd. from alc. N-Aryl-4,4'-dicyanodiphenylamines were prep'd.

L3 ANSWER 77 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 CHCl3, 2, 2HCl, aq. alc. and Et2O, 63, 330°; H, Et, H, alc., 1, 2HCl, aq. alc.-Et2O, 57, above 300°; Cl, H, H, CHCl3, 3, 2HCl, H2O, 38, above 300°; H, Ph, H, CHCl3-dioxane, 6, 2HCl, aq. Me2CO, 70, above 300°; H, Bz, H, CHCl3, 12, 2HCl, aq. Me2CO, 31, 280°; Me, Me, H, CHCl3, 7, 2HCl, aq. Me2CO-alc., 47, 285°; H, Bu, H, CHCl3, 4, diacetate, aq. Me2CO, 63, 275-80°; H, allyl, H, CHCl3, 5, diacetate, H2O or aq. Me2CO, 67, 271-3°; H, Pr, H, CHCl3-Et2O, 1, 2HCl, aq. Me2CO, 78, 232-8°; H, p-C6H4C(=NH)NH2, H, CHCl3-dioxane, 10, CHCl3, aq. Me2CO, 50, 370-5°; NH2, H, H, alc., 6, 2HCl, H2O, 54, 310°; H, (CH2)3, H, alc., 2, 4HCl, aq. Me2CO, 67, 300-10°; H, p-C6H4NH2, H, alc., 6, diacetate, aq. Me2CO, 37, 169°; Me, Bz, Cl, alc., 1, diacetate, AcOH, ~225-30°; Me, H, Cl, dioxane, 2, 2HCl, H2O, 70, above 350°; H, CGH13, 2, 2HCl, H2O, 38, above 350°; H, Bz, H, 2HCl, aq. Me2CO, 63, 265°; Cl, H, Cl, CHCl3-Et2O, 4, 2HCl, 40% alc., 90, above 350°; Me, H, Me, dioxane, 5, 2HCl, aq. Me2CO, 75, above 350°; OMe, H, H, CHCl3, 3, 2HCl, aq. Me2CO, 64, 110-15°; OH, H, H, dioxane-Et2O, 4, 2HCl, aq. Me2CO, 93, 338-40°; OEt, H, H, CHCl3, 6, 2HCl, aq. Me2CO, 85, 115-17°; OBu, H, H, CHCl3, 1, 2HCl, aq. Me2CO, 85, 133-4°; OCH:CHMe, H, H, CHCl3, 3, 2HCl, aq. Me2CO, 79, 108-10°; OPr, H, H, CHCl3, 2, 2HCl, aq. Me2CO, 78, 125-8°; H, NO, H, CHCl3, ~, 2HCl, aq. Me2CO, 88, greater than 300°; Me, H, Me, H, CHCl3, ~, 2HCl, aq. Me2CO, 44, 193-201°; OMe, H, H, CHCl3, 2, diacetate, aq. Me2CO, 69, 192-3°; Me, NO, H, CHCl3, ~, diacetate, aq. Me2CO, 93, 227-8°. Addn. of 5.5 g. NaNO2 in 15 ml. H2O to a cold soln. of 4,4'-diamidino-2-methoxydiphenylamine 2HCl in H2O pptd. the sparingly solv. nitrite as a solid. 2N HCl (40 ml.) added during 5-10 min. and the ppt. redissolved, the soln. kept 1 hr., 25 ml. 5% NaOH added, the nitrosoamine base collected and treated with AcOH gave 8 g. of the diacetate. The diimidoate was prep'd. in CHCl3-dioxane and 76% 5-amidino-1-(p-aminophenyl)benzimidazole-2HCl collected, m. 305° (aq. Me2CO). 5-Aminido-1-(p-aminophenyl)-2-methoxybenzimidazole-2HCl (67%) (H2O) and 5-Aminido-1-(p-aminophenyl)benzo-1,2,3-triazole-2HCl (78%) (Me2CO-dil. HCl) were prep'd. similarly.

IT 102703-74-2, 5-Benzimidazolecarbonitrile, 1-(p-cyanophenyl)-2-phenyl- (preparation of)
 RN 102703-74-2 CAPLUS
 CN 5-Benzimidazolecarbonitrile, 1-(p-cyanophenyl)-2-phenyl- (6CI) (CA INDEX NAME)



L3 ANSWER 77 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 by treatment of 1 mole 4,4'-dicyanodiphenylamine in the presence of K2CO3 and a trace of Cu bronze in refluxing PhNO2 4-6 hrs. with an excess of (a) Ph, (b) p-bromonitrobenzene, or (c) p-bromobenzonitrile. The products from (a) or (b) were isolated by addn. of CHCl3 and evapn. The solid (c) was collected, washed, and the dried solid extd. with hot HCONMe2. 4,4'-Dicyano-N-(p-nitrophenyl)-diphenylamine (1.7 g.) in 15 ml. refluxing HCONMe2 and 2.5 ml. AcOH treated with reduced Fe gave 1.25 g. amine. The following N-substituted 4,4'-dicyanodiphenylamines were thus obtained (N-substituent, solvent for crystn., % yield, and m.p. given): Me, alc., 89, 153°; Et, alc., 55, 122-3°; Pr, alc., 63, 96°; allyl, alc., 71, 111-12°; Bu, Et2O, 41, 80-1°; CGH13, alc., 60, 77°; (CH2)3, dioxane, 50, 211-12°; Ph, alc., 78, 190-1°; p-NC6H4, PhNO2, 80, 346°; p-HZNC6H4, ~, 73, 275°; p-NC6H4, HCONMe2, 57, 342°. 4,4'-Dicyano-2-methoxydiphenylamine (1 g.), 1 g. p-MeC6H4SO3Me, 0.8 g. K2CO3, a trace of Cu bronze, and 10 ml. anisole refluxed 3 hrs. gave 0.95 g. 4,4'-Dicyano-2-methoxy-N-methyldiphenylamine, m. 149-50° (alc.). 4,4'-Dicyano-2-methyldiphenylamine and p-MeC6H4SO3Me gave 94% 4,4'-Dicyano-2,N-dimethyldiphenylamine, m. 112° (alc.). Refluxing 5 g. 2-amino-4,4'-dicyanodiphenylamine in 25 ml. 98-100% HCO2H 1.5 hrs. gave 5-cyano-1-(p-cyanophenyl)benzimidazole, m. 289° (AcOH). 2-Amino-4,4'-dicyanodiphenylamine (12.5 g.), 50 ml. C5H5N, and 30 ml. Ac2O refluxed 0.5 hr. gave 12 g. 2-acetamido deriv., m. 238-40° (decompn.), converted by refluxing 1.5-2.0 hrs. in 40 ml. Dowtherm into 8.4 g. 5-cyano-1-(p-cyanophenyl)-2-methylbenzimidazole, m. 233°. 5-cyano-1-(p-cyanophenyl)-2-phenylbenzimidazole similarly prep'd., m. 182°, solidified, and m. 193°. 2-Amino-4,4'-dicyanodiphenylamine (10 g.), 100 ml. alc., 5 ml. 7.5N isethionic acid, 10 ml. H2O, and 5 ml. concd. HCl treated at 10° with 5 g. NaNO2 in 10 ml. H2O and 5 ml. alc. and kept 3 hrs. at room temp. gave 95% 5-cyano-1-(p-cyanophenyl)benzo-1,2,3-triazole, m. 284° (dioxane). 4,4'-Dicyano-2-nitrodiphenylamine (1 g.), 2 ml. CGC2Et2, 1, 2HCl, K2CO3, and 10 ml. Me2CO refluxed 2 hrs. gave 0.8 g. 4,4'-Dicyano-N-ethoxycarbonyl-2-nitrophenoxydiphenylamine, yellow crystals, m. 123-4° (alc.). Similarly, 4,4'-Dicyano-2-hydroxydiphenylamine gave 4,4'-Dicyano-N-ethoxycarbonyl-2-ethoxycarbonyloxydiphenylamine, m. 131.5-2.5° (alc.). If the reaction was carried out with an excess of dinitrile, the product was 6-cyano-3-(p-cyanophenyl)benzoxazolone (IV), m. 290°. IV was best prep'd. by the following procedure. NaOH (1.46 g.) in a little H2O and sufficient alc. to make 24 ml. added to 13.8 g. of the diethoxycarbonyl compd. in 50 ml. dioxane and 50 ml. alc., left 2-3 hrs., concd. HCl added, and the whole dild. with H2O gave 8.8 g. IV. The nitriles were converted into the amidines (V), through the imidates, by the usual Pinner procedure. V were often isolated as HCl salts. Some of the more sol. salts were not too easily crystd. In such cases the bases were isolated and converted into the acetates. The following diamides, HC:CH:[H2NC(:NH)C:CH:CR2:CH:C(C(=O)NH2)2:CH:CH2], were thus prep'd. (R, R1, R2, solvent, time in days, amidine salt, crystn. solvent, yield, and m.p. given): Me, H, H, CGH13, 4, 2HCl, H2O, 94, ~, H, Me, H, added, and the whole dild. with H2O gave 8.8 g. IV. The nitriles were converted into the amidines (V), through the imidates, by the usual Pinner procedure. V were often isolated as HCl salts. Some of the more sol. salts were not too easily crystd. In such cases the bases were isolated and converted into the acetates. The following diamides, HC:CH:[H2NC(:NH)C:CH:CR2:CH:C(C(=O)NH2)2:CH:CH2], were thus prep'd. (R, R1, R2, solvent, time in days, amidine salt, crystn. solvent, yield, and m.p. given): Me, H, H, CGH13, 4, 2HCl, H2O, 94, ~, H, Me, H,

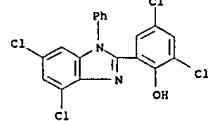
L3 ANSWER 78 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1958-62906 CAPLUS
 DOCUMENT NUMBER: 52-62906
 ORIGINAL REFERENCE NO.: 52-1348e-g
 TITLE: Insecticides and disinfectants
 INVENTOR(S): Jerchel, Dietrich
 PATENT ASSIGNEE(S): C. H. Boehringer Sohn
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
 DE 888032 19530827 DE 1951-B17224 19511019
 AB Halogenated 2-arylbenzimidazoles containing at least 2 halogen atoms and, possibly, hydroxyl groups, are valuable insecticides and disinfectants of low toxicity. Ni can be substituted with alkyl, aralkyl, or aryl groups. To obtain the products, substituted o-phenylenediamines are treated with substituted BzH in the presence of a dehydrogenating agent. The following substances have been synthesized (yields and m.p. given): 2-(2-hydroxy-5,5-dichlorophenyl)-benzimidazole (I), 85%, 293-300°; 2-(2,4-dichlorophenyl)-4,6-dichlorobenzimidazole, 80%, 160-1°; 2-(2-hydroxy-5,5-dichlorophenyl)-4,6-dichlorobenzimidazole (II), 65%, 231-2°; 1-methyl-2-(2,4-dichlorophenyl)-4,6-dichlorobenzimidazole, 90%, 186-7°; 1-methyl-2-(2-hydroxy-3,5-dichlorophenyl)-4,6-dichlorobenzimidazole, 85%, 276-8°; 1-benzyl-2-(2-hydroxy-3,5-dichlorophenyl)-4,6-dichlorobenzimidazole, 73%, 191-2°; and 5,6-dichloro-2-phenylbenzimidazole (III), 60%, 145°. The fungicidal and bactericidal action of the compds. has been tested. Inhibits completely the growth of *Staphylococcus* in a dilution of 1:17,000 and II in a dilution of 1:805,000. Thus, 10 ml. of a 1% solution of II at pH 8.5 is diluted with 1 l. H2O to give an excellent disinfectant, and 1 g. III per 3-10 l. H2O gives an effective spraying fungicide.

IT 101881-87-2, Phenol, 2,4-dichloro-6-(4,6-dichloro-1-phenyl-2-benzimidazolyl)- (preparation of)

RN 101881-87-2 CAPLUS

CN Phenol, 2,4-dichloro-6-(4,6-dichloro-1-phenyl-2-benzimidazolyl)- (6CI) (CA INDEX NAME)



L3 ANSWER 79 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1954:7161 CAPLUS

DOCUMENT NUMBER: 48-7161

ORIGINAL REFERENCE NO.: 48:1319a-i, 1319a-i, 1320a-i

TITLE: The nature of light-induced degradation products of diazo derivatives. IV. The light reaction of α -quinonemediazides: photosyntheses of cyclopentadiene derivatives

AUTHOR(S): Sus, Oskar; Hoffmann, Hinrich; Rosenberger, Siegfried;

Corporate Source: Kestka, Rudolf

Source: Kalle & Co., Wiesbaden-Biebrich, Germany

Document Type: Ann. (1953), 579, 133-58

Language: Unavailable

Other Source(s): CASREACT 48:7161

GJ: For diagram(s), see printed CA issue.

AB: ct. C.A. 42, 11541. 6-Nitro-1,2-naphthoquinone-2-diazide (2-diazo-6-nitro-1(2H)-naphthalenone) (I) in 4.5 l. AcOH and 240 cc. H₂O was filtered through C and the filtrate, in sealed fermentation vessels,

exposed to sunlight or UV light at 0°. The reaction was complete when an aliquot no longer coupled with phloroglucinol to form an azo dye. The solution, concentrated in vacuo, gave about 8.5 g. (crude) 5-nitro-1-indenecarboxylic acid (II), pale yellow crystalline threads, m. 188-9° (from AcOH), which when heated to 185-210° gave CO₂ and 5-nitroindene (III), m. 74-5° (by sublimation), also prepared by heating II in HCO₂Me at 45-50°. Hydrogenation of III in EtOH by shaking with Raney Ni, steam-distilling, and cooling to 0° gave 5-aminohydridene, m. 36°. Ac derivative, m. 106° (from C6H₆-gasoline). 1-Amino-2-hydroxy-7-methoxyxanthohthalene (10 g.) in 10% alc. HCl with 10 cc. iso-AMNO gave 9.35 g. of an HCl salt, which, when stirred with H₂O or on attempted recryst. from much H₂O gave 7-methoxy-1,2-naphthoquinone-1-diazide, C11H8O2N₂, yellow needles, m. 103-4° (from 50% alc.), which when irradiated at 0° gave 5-methoxy-3-indenecarboxylic acid (IV), m. 160-6° (purified by solution in aqueous NaHCO₃ precipitation with HCl, and crystallization from C6H₆ or aqueous MeOH);

the corresponding 5-methoxyindene (V), b.p. 155-60°, with nerolinlike odor, was formed by heating IV in HCO₂Me₂ under N₂. When the decarboxylation of IV by direct heating at about 185°, was attempted, C₂H₂O₂06, a dimer of IV, m. 235-6°, was formed. IV (0.3 g.) in AcOEt with CH₂N₂ in Et₂O, followed by shaking successively with 2% AcOH, H₂O, 5% NaHCO₃ and H₂O, drying the Et₂O solution with Na₂SO₄, and evaporating gave Me

1,3a, 4,9a-tetrahydroindeno[1,2-c]pyrazole-4-carboxylate (VI). The HCl salt of 1-amino-2-hydroxyxanthophenanthrene (VII) in 220 cc. MeOCH₂CH₂OH, 5 cc. 32% HCl and 40 cc. H₂O, treated at 50° with 8 cc. 40% NaNO₂ gave, on direct crystallization a red modification of 1,2-phenanthroquinone-1-diazide (VIII), C₁₄H₈O₂N₂ m. 151° (decomposition). Diazotization of VII carried out with AMNO at 25° (or below). With subsequent cooling at about 0°, gave a yellow-green modification (VIIb), small rods, m. 150-1° (decomposition). VIIb could be recrystd. by rapid solution in warm MeOCH₂CH₂OH containing a few drops HCl, filtering through C and treating the filtrate at 60° with 10%

L3 ANSWER 79 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) readily to the free acid, C₇H₇O₂N₃ (XVII), colorless needles, m. 283-4° (decompn.), giving a play of colors in aq. NaHCO₃ (turning from yellow to blue gray to blue-violet), a deep blue color with FeCl₃, and a red color when coupled with XVI. XVII was also formed by irradiating XIV in H₂O, in the absence of AcOH. XVII was shown to have properties totally different from those of 1-methyl-6,7-dihydroxy-1H-benzotriazole (XVIII). 2,3,4-Br₃MeO₂C₆H₂N₂ and MeNH₂ gave the 6-MeNH analog; this was catalytically reduced to 2,3,4-MeNH(Me)C₆H₂N₂ and diazotized, and treated with HBr to give XVIII. HBr, m. 210°. By coupling 1-phenyl-5-hydroxybenzimidazole (XIX) in NaOH and pyridine with p-HO₃C₆H₄N₂Cl followed by acidification, the corresponding (unanalyzed) ochrecolored azo dye was formed, which, in NaOH with Na₂SO₄, followed by acidification with AcOH, gave the 4-NH₂ deriv. of XIX, colorless prisms, m. 211-12° (decompn.), yielding, on diazotization (XX), yellow, m. 162-3° (from 90% EtOH). Irradiated 2 h. in AcOH and H₂O, XX gave C₁₅H₁₂O₃N₂ (XXa), 202-6°, contg. an Ac group, and apparently analogous to XV, and, like the latter, could not be decarboxylated by heating in N. 2,4-H₂N(O₂N₂)C₆H₃NHPh (79.6 g.) triturated with 38 g. BzH, heated 15 min. with PhNO₂ cooled, and treated with 50 cc. EtOH and HCl gas, gave 58 g. 5-nitro-1,2-diphenylbenzimidazole, 180-1° (from AcOH) readily reduced to the 5-NH₂ analog, m. 191-2°, which, when diazotized in aq. H₂SO₄ at 0°, followed by heating (until there was no further coupling with R acid), dild. with H₂O, and neutralized with NaOH gave the 5-hydroxy analog, C₁₉H₁₄O₂N₂ (XXI), m. 249-50° (decompn.). With p-HO₃C₆H₄N₂Cl, XXI gave the azo dye, C₂₅H₁₈O₄N₄ (XXII), ochre-colored, charring when heated. XXII in aq. NaOH with Na₂SO₄ gave the 4-amino deriv., C₁₉H₁₅NO₃ (XXIII), of XXI, m. 206-9°, isolated as the yellow Na salt (XXIIIa), pale yellow prisms, m. 211-12°, losing AcOH when kept in vacuo over KOH (giving XXIIIb). XXIIa (prepd. from 13.5 g. XXII) in 50 cc. 16% HCl, filtered through C, cooled to 0° and treated dropwise with NaNO₂ gave the 2-Ph deriv. of XX, orange needles, m. 157-8° (decompn.), which when irradiated in aq. AcOH gave the 2-Ph deriv. (XXIV) of XXa, colorless rhombs, m. 222-3°. 1,2-Naphthoquinone-2-diazide-5-sulfonil chloride (XXV) (Ger. 865,410) and PhNH₂ in C₆H₆ gave the corresponding 5-sulfonilide (XXVI), C₁₆H₁₁O₃N₃, yellow needles, m. 168-9° (from C₆H₆ or EtOH), which when irradiated in dioxane contg. HCl gave 4-phenylsulfamoyl-1-indenecarboxylic acid, colorless, m. 183-4° (decompn.) (from Me₂CO-H₂O), Me ester, m. 188-9°. Prepd. similarly to XXVI was 4-sulfamoyl-1,2-naphthoquinone-2-diazide golden yellow, m. 162°, giving, on irradi. 3-phenylsulfamoyl-1-indenecarboxylic acid, pale yellow, m. 151-3° (from AcOEt by the addn. of petr. ether). To 1.6 g. XXVI in 20 cc. dioxane, 3.1 cc. 2N NaOH, and 8 cc. H₂O (at or below 20°) was added 1.6 g. XXV in 10 cc. dioxane, giving N,N-bis[6-diazo-5,6-dihydro-5-oxo-1-naphthylsulfamoyl]aniline (XXVII), alkali-insol., m. 145.5-6.0° (decompn.) (from AcOH). Irradiated at 0° in sunlight, XXVII gave the expected deriv., C₂₆H₁₉NO₆S₂, m. 249-50° (decompn. from AcOH). From Na 6-hydroxy-1,2,3,4-tetrahydro-7-naphthalenesulfonate and p-MeC₆H₄SO₂Cl was formed the 6-tosylate (isolated as the Na salt, m. 128-9° (decompn.)), converted by PCl₅ into the sulfonyl chloride, C₁₇H₁₇NO₅S₂Cl, hexagons, m. 133-4°, from which was prepd. the 7-sulfonilide, prisms, m. 157-8°; this on sapon. with NaOH in alc. gave 6-hydroxy-1,2,3,4-tetrahydro-7-naphthalenesulfonamide (XXVIII), thin rhombs, m. 163-5° (Na salt (XXVIIIa), nacreous hexagons). To 38 g. XXVIIIa in 400 cc. 2.5% NaOH, 400 cc. dioxane and 5 cc. pyridine at 0° was added very gradually PhNH₂Cl (from 17 g. PhNH₂·HCl), acidified with 30% HCl, and crystd. from

L3 ANSWER 79 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) HCl to incipient cloudiness. VII (presumably either form) in dioxane contg. 50% AcOH at 10-19°, stirred and irradiated with a Hg vapor lamp gave benz-6,7-indene-3-carboxylic acid, pale ochre, m. 249-50° (decompn.) (from AcOH); Me ester, colorless, m. 139°.

Benz-6,7-indene m. 42° (from Et₂O). A mixt. of α -C₁₀H₇CH₂CO₂H (15 g.), 15 g. 2,5-O₂NMeO₂C₆H₃CHO, 45 cc. redistd.Ac₂O, and dry Et₂N under N, heated 12 h. at 100° gave

4-hydroxyxanthene (IX) (not purified) (cf. Cook and Schoental, C.A. 39,

4603.5). IV (0.6 g.) in 200 cc. EtOH and 20 cc. 10% NaOH at 2° with 1.5 cc. PhHCl (from 1 cc. PhHH₂) gave the 3-phenylazo deriv. of IX,

reddish brown hexagonal plates, m. 248-9° (from AcOH or dioxane).

Which on hydrogenation with Raney Ni, soln. in hot HCO₂Me₂ filtrationthrough C, and treatment with EtOH gave the 3-NH₂ deriv. of IX, colorlesshexagons, not m. below 400°. 0.4 g. of which in 7.5 cc. HCO₂Me₂ and1.25 cc. HCl at 0-5° was treated with 2N NaNO₂ giving 0.37 g.

1,2-chrysequinone-1-diazide (X) golden yellow, darkening at 150°

and charring without m., coupling very slowly with phloroglucinol in

NH₄OH giving a red compd. In AcOH, in direct sunlight, X gave naphth[2,1-*e*]-indene-1-carboxylic acid, prismatic rectangles (from AcOH or EtOH) decomp., between 230 and 270° depending on the rate of heating; this on decarboxylation in HCO₂Me₂ gave cyclopentadienophenanthrene, C₁₇H₁₂, colorless, m. 164-5° giving a blue color with concd. H₂SO₄.

4-Nitro-5-hydroxy-2-phenyl-2Hbenzotriazole (11 g.) (cf. Fries and Roth, C.A. 6, 2413) in EtOH hydrogenated with

Raney Ni at 70° and 60 atm., and treated with HCl, gave 5.7 g. HCl salt of the 4-NH₂ analog, C₁₂H₁₀ON4Cl (sic), cream-colored, m. 257-60°,which in HCO₂Me₂ with aq. NaNO₂ at 0° gave XI, golden yellow, m.

200-1° (decompn.) (from dioxane), forming an azo dye with

phloroglucinol which gave typical metallic lakes; XI, irradiated with a

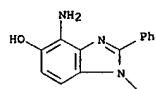
Hg vapor lamp, gave (XII), rectangles, m. 225° (decompn.) (Me ester, m. 119-20°); decarboxylation of which, either by heating directly or in HCO₂Me₂ gave the corresponding indene, C₁₁H₉N₃, needles, m. 71° (from MeOH). From 5-amino-1-methyl-1H-benzotriazole (Pinnow and Koch, Ber. 30, 2852(1897)) in hot aq. NaOH, with NaNO₂, followed at 0° by the dropwise addn. of 2% H₂SO₄, and subsequently by addn. of an excess concd. H₂SO₄ and heating 5 h. at 115-20° (until the mixt. no longer coupled with R acid) there was formed 13.1 g. 5-hydroxy-1-methyl-1H-benzotriazole, C₇H₇ON₃, m. 192-3°, which with HCl and NaNO₂ gave the 4-nitroso deriv., C₇H₆O₂N₄, platelets, decomp. about 227° (from AcOH); this when hydrogenated gave the 4-amino deriv. (XIII) isolated as the HCl salt (XIIIa), C₇H₈ON₄·HCl, colorless prisms (from EtOH contg. HCl) turning yellow on drying, carbonizing gradually at about 210° and losing HCl when heated 24 h. at 112-5° in a drying pistol over KOH and P₂O₅ giving XIII, C₇H₈ON₄, m. 234-6° (decompn.). Treated at 0° with HCl and NaNO₂, XIIIa gave (XIV), yellow needles, 170-1° (decompn.) (from H₂O or EtOH). Irradiated in 300 cc. AcOH and 15 cc. H₂O, 1 g. XIV gave 0.55 g. of compd. XV, colorless plates, m. 220-1°, not decarboxylated at 290°, and which failed to react with CH₂N₂, but which gave a deep red color with "Fast Blue salt BB" (XVI). Deacetylation of XV with 16% HCl gave the HCl salt of the corresponding acid, prisms, hydrolyzing

L3 ANSWER 79 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) dioxane contg. 5% AcOH giving 19 g. 8-PhN₂ deriv. of XXVIII, m. 237-8° (decompn.), which when reduced with Hoechst Ni catalyst in alc. at 60 atm. and 80°, dissolved in 6% NaOH, washed with Et₂O, filtered through C, and acidified with AcOH gave 9 g. of the 8-NH₂ deriv. of XXVIII, m. 160° (never completely purified because of its ready oxidn.). Which, by the usual method was converted into the diazide (XXIX) orange-yellow, m. 160-5° (decompn.), giving, when irradiated 1.5 h. in sunlight, XX, C₁₆H₁₅NO₃, an amorphous powder, To 1 g. 1,2,3- H_2 N(HO)C₁₀H₅CONHPh in 540 cc. EtOH was added 4.2 g. O₂(OAc)₂ in 108 cc. glacial AcOH and 42 cc. 2N NaNO₂; the mixt. warmed to 50-60° gave the expected oxo-diazo compd., yellow, m. 167-8° (from AcOH) giving after an 11 h. irradn. the indene deriv., C₁₇H₁₃O₃N, m. 141° (decompn.) (best purified by soln. in aq. NaHCO₃ and pptn. with HCl); 2-indenecarboxanilide, C₁₆H₁₃ON, irregular hexagons, m. 180-1°.

IT 858502-31-5, 5-Benzimidazolol, 4-amino-1,2-diphenyl- (and derivs.)

RN 858502-31-5 CAPLUS

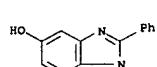
CN 5-Benzimidazolol, 4-amino-1,2-diphenyl- (5CI) (CA INDEX NAME)



IT 858502-26-8, 5-Benzimidazolol, 1,2-diphenyl- (and dye therefrom)

RN 858502-26-8 CAPLUS

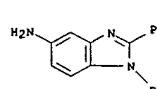
CN 5-Benzimidazolol, 1,2-diphenyl- (5CI) (CA INDEX NAME)



IT 350235-01-3, Benzimidazole, 5-amino-1,2-diphenyl- (preparation of)

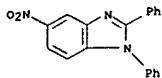
RN 350235-01-3 CAPLUS

CN 1H-Benzimidazolol-5-amino, 1,2-diphenyl- (9CI) (CA INDEX NAME)



RN 853791-71-6 CAPLUS

CN Benzimidazole, 5-nitro-1,2-diphenyl- (5CI) (CA INDEX NAME)



L3 ANSWER 80 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1953-6359 CAPLUS
 DOCUMENT NUMBER: 47:6359
 ORIGINAL REFERENCE NO.: 47:1132f-i, 1133a-i, 1134a-g
 TITLE: Some benzimidazole derivatives
 AUTHOR(S): Feitelson, B. N.; Mamalis, P.; Moualim, R. J.; Petrow,
 V.; Stephenson, O.; Sturgeon, B.

CORPORATE SOURCE: Brit. Drug House, Ltd., London
 SOURCE: Journal of the Chemical Society (1952) 2389-98
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable

AB (CH₂)₁₀(CO₂H)₂ (1.1 g.), 900 mg. o-C₆H₄(NH₂)₂, and 4 N HCl, heated 5 h. at 135°, give decamethylenebis(2-benzimidazole) (I), m. 298-9° (di-HCl salt, m. 261-3°). I (4.69 g.) in concentrated H₂SO₄, treated at 0° with 3.62 g. KNO₃ and stirred 2 h., yields the 5-N₂O derivative (III), with 2 mols. H₂O (sulfate) (5.77 g.), m. 255-6°. The following homologs of II were prepared (n given): 2 (III), with 2 mols.

H₂O, m. 289-90°, 77%; 3, m. 165°, 69%; 4, m. 263°, 80%; 5, with 2 mols. H₂O, m. 208°, 87%; 6, with 2 mols. H₂O, m. 249-9°, 78%; 8, m. 136°, 93%. III (2 g.) in 100 mL MeOCH₂CH₂OH, reduced at room temperature over Raney Ni and the solution

treated with 4 mL concentrated HCl, gives 85% ethylenebis(5-amino-2-benzimidazole)-

4HCl, m. 345°; the following homologs were similarly prepared (n given): 3, m. above 300°, 81%; 4, m. above 300°, 86%; 5, m. above 300°, 62%; 6, m. above 345°, 73%; 8, m. 324-5°, 86%. (:CHOC₂H₂)₂ (5.1 g.), 9.2 g. o-O₂NC₆H₄NH₂, and 50 mL C₆H₆, refluxed until HCl evolution ceases, give 83% fumarobis (o-nitroanilide) (IV), pale yellow, m. 283°; reduction of 4 g. IV in 150 mL hot dioxane over Raney Ni and refluxing 2 h. in 4 N HCl give ethylenebis(2-benzimidazole)-2HCl·2H₂O, m. above 330°. (:CH₂CH₂COCl)₂ (from 2 g. acid) and 4.1 g. 2,4-O₂N(C₆H₃NH₂), heated 1 h. at 190°, give 57% adipobis(4-cyano-2-nitroanilide), yellow, m. 221-2°; reduction over Raney Ni in hot EtOCH₂CH₂OH and heating 1 h. with 5 mL concentrated HCl

give the di-HCl salt, brown, m. 203°, of tetramethylenebis(5-cyano-2-benzimidazole), with 2 mols. H₂O, m. 260-1°; octamethylene homolog, m. 145°, 42%. (CH₂)₂(COCl)₂ (from 0.15 g. acid) and 18.3 g. 2,4-(O₂N)C₆H₃NH₂, heated 1 h. at 170-80°, give 55% pimelobis(2,4-dinitroanilide), yellow, m. 188°; it could not be converted into a benzimidazole derivative 2-Methyl-5-nitro-1-phenylbenzimidazole forms a methosulfate, m. 210° (decomposition) and a methochloride, m. 182° (decomposition); 5-Amino-2-methyl-1-phenylbenzimidazole methochloride-HCl·3H₂O, m. 190° (decomposition). 2,4-Diacetamido-4-nitrodiethylamine, yellow, m. 236°; heated 40 min. with 4 N HCl, this yields 66% 1-(p-aminophenyl)-2-methyl-5-nitrobenzimidazole (V), m. 190° (Ac derivative, m. 108°); reduction over Raney Ni gives the 1-(p-aminophenyl) analog (VI), m. 230° (di-Ac derivative, m. 220°). The methochloride-HCl·4H₂O from V, hygroscopic, m. above 300°; the methochloride-2HCl·5H₂O from VI, hygroscopic, decomp., 200°. 1-Methyl-2-(p-

L3 ANSWER 80 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 nitrophenyl)benzimidazole (4 g.) and 10 mL MeI in 10 mL MeOH, heated 3 h. at 120° and extd. with 500 mL boiling H₂O, give the insol. methiodide, C₁₅H₁₄-O₂N₃I₃, brown, m. 182°; the aq. aff. treatment deposits the methiodide, yellow, m. 297° (decompn.).

1-Methyl-5-nitro-2-(p-nitrophenyl)benzimidazole (VII) yields a methosulfate, m. 280°; methobromide, pale yellow, m. 255°; methochloride, m. 242° (decompn.). Redn. of VII in EtOH over Raney Ni and acetylation give 5-acetamido-2-(p-acetamidophenyl)-1-methylbenzimidazole, with 0.5 mL H₂O, m. 264-5°. Redn. of 5-nitro-2-(p-nitrophenyl)benzimidazole (VIII) in hot MeOH with SnCl₂ gives

5-amino-2-(p-aminophenyl)benzimidazole-3HCl, m. above 320°; Ac₂O in AcOH (40 min. at room temp.) gives 5-acetamido-2-(p-acetamidophenyl)benzimidazole, with 0.5 mol. H₂O, m. 358°; a methosulfate could not be prep'd. 5-Amino-2-(p-aminophenyl)-1-phenylbenzimidazole, m. 265°; di-Ac deriv., m. 207°; methochloride-2HCl·5H₂O, pale yellow, hygroscopic, m. 210° (decompn.). p-O₂NC₆H₄CHO (20 g.) in 200 mL hot AcOH, added to 20 g. 4,1,2-O₂NC₆H₃(NH₂)₂ in hot AcOH and refluxed 5 h., 450 mL AcOH removed

by distn. (1 h.) (some VIII recovered), and the filtrate dild. with H₂O, gives 11 g. 5-nitro-2-(p-nitrophenyl)benzimidazole,

orange-yellow, m. 256-8°. 2-(p-Diethylaminophenyl)benzimidazole, buff, m. 232°. 2-(p-Dimethylaminophenyl)-1-methyl-5-nitrobenzimidazole-HCl, m. 259°; the p-diethylaminophenyl analog m. 250°. 5-Iodo-1,2-phenylenediamine, silvery, m. 73°; 3,5-diodo deriv., m. 112°; 5-Iodo-2-oxobenzenimidazoline (IX) m. 250°; 5,7-diodo deriv. (X), m. 230°. Decamethylenebis(5,6-dichloro-3-methyl-1-benzimidazolinium) dibromide, m. 232° (decompn.). The following 2-arylbenzimidazoles were prep'd. from IX and X with 3-4-(HO)C₆H₄CHO, 3,5,4-I₂(HO)C₆H₂CHO, and 4-O₂NC₆H₄CHO: 5-iodo-2-Me, yellow, m. 220°; 5,7-diodo-2-Me, cream, m. 257°; 2-(4-hydroxy-3-iodophenyl), m. 248°; 2-(4-hydroxy-3-iodophenyl)-1-methyl-5-nitro, m. 232°; 2-(4-hydroxy-3-iodophenyl)-5,7-diodo, pale yellow, m. 187°; 2-(p-aminophenyl)-5,7-diodo, m. 232°; 2-(4-hydroxy-3,5-diodophenyl), pale brown, m. 193°; 2-(4-hydroxy-3,5-diodophenyl)-5,7-diodo, pale yellow needles, m. 193°; 2-(p-hydroxymethyl)-5,7-diodo, cream, m. 230°; 2-(4-hydroxy-3,5-diodophenyl)-5,7-diodo, pale yellow, m. 200°; 4-(p-dimethylaminophenyl)-5,7-diodo, pale yellow, m. 198°; 1-(p-iodophenyl)-2-methyl-5-nitro (HCl salt), yellow, m. 216°. 1-(2-Chloroethyl)-2-chloromethylbenzimidazole-HCl, m. above 290°; 5-Br deriv., m. 188-90° (decompn.); 5-chloro-6-Me deriv., m. 204-5° (decompn.); 5,6-di-Cl deriv., m. 190-2° (decompn.); 5,7-di-Cl deriv., m. 182-3°. Derivs. of benzimidazole-HCl·5-chloro-2-chloromethyl-1-Me, m. 301-28° (decompn.); 5-chloro-1-(2-chloroethyl), m. 174-5°; 5-chloro-1-(2-chloroethyl)-6-Me, m. 180-1°; 6-chloro-2-chloromethyl-1-Me, m. 315-17° (decompn.); 6-chloro-1-(2-chloroethyl), m. 197-8°; 5,7-dichloro-1-(2-chloroethyl), m. 202-4°. The following N-substituted derivs. of various anilines were prep'd. 4-Chloro-2-nitroaniline: Bu, orange, m. 30-1°; benzyl, orange, m. 68°; 2-hydroxyethyl, orange, m. 125-6°; Pr, orange, m. 67-8°; nitroaniline: Et, orange, m. 125-6°; Pr, orange, m. 67-8°; iso-Pr, orange, m. 90-2°; Bu, orange, m. 42-3°; benzyl,

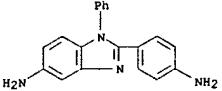
L3 ANSWER 80 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 orange, m. 110-11°; 2-hydroxyethyl, vermillion, m. 171-2°; 2-hydroxypropyl, orange, m. 137-8°; 2,3-dihydroxypropyl, orange, m. 166°. 5-Chloro-2-nitroaniline, iso-Pr, orange, m. 43-4°; Bu, orange-yellow, m. 28°; benzyl, orange, m. 100-1°; 2-hydroxyethyl, red, m. 114-5°; 2,3-dihydroxypropyl, golden, m. 86°; 5-Chloro-6-methyl-2-nitroaniline: Et, orange, m. 58-9°; benzyl, orange, m. 54°; 2-hydroxyethyl, yellow, m. 75°; 4,5-Dichloro-2-nitroaniline, Me, orange, m. 148°; Et, orange, m. 120°; Pr, orange, m. 84-5°; benzyl, yellow, m. 104°; Ph, orange, m. 96°; 2,3-dihydroxypropyl, yellow, m. 142°; 4,5,6-Trichloro-2-nitroaniline, Me, orange-yellow, m. 12-3°; benzyl, orange-red, m. 55°; 4-Bromo-2-nitroaniline, Et, orange, m. 102-103°. Derivs. of 5-chlorobenzimidazole: 1-Me (HCl salt), m. 243-5°; 1,2-di-Me (HCl salt), m. 277°; 1-Bu (picrate), yellow, m. 185-6°; 2-hydroxymethyl, gray, m. 210°; 1-methyl-2-hydroxymethyl, m. 181-2°; 1-(2-hydroxyethyl), m. 83-4°; 1-(2-hydroxyethyl)-2-hydroxymethyl, m. 155-6°; 5-Chloro-6-methylbenzimidazole, 1-Me, with 0.5 mol. H₂O, m. 114-15° (HCl salt), m. 255-6°; picrate, yellow, m. 274-5° (decompn.); methiodide, m. 255° (decompn.); methochloride, m. 220-1° (decompn.); 1-Et, cream, m. 87°; 1-Pr, m. 63-4° (HCl salt, with 1 mol. H₂O), m. 93-5°; picrate, yellow, m. 190°; 1-isop-Pr (picrate), yellow, m. 257°; 1-Bu (picrate), yellow, m. 197°; 1-benzyl, m. 155-6°; 1-(2-hydroxyethyl), m. 155-6°; 1-(2-hydroxyethyl)-2-hydroxymethyl, m. 149-51°; 1-(2,3-dihydroxypropyl), m. 140° (3-methiodide, m. 180°); 3-methochloride, m. 212°; 3-(2,3-dihydroxypropyl)-1-(methochloride), m. 236-7° (decompn.). 6-Chlorobenzimidazole: 1,2-di-Me (HCl salt), m. 158°; 1-Et (HCl salt), m. 211-13°; picrate, yellow, m. 236-7°; 1-isop-Pr (HCl salt, with 1 mol. H₂O), m. 194-6°; picrate, yellow, m. 211°; 1-Bu (HCl salt, with 1 mol. H₂O), m. 178-9°; picrate, yellow, m. 257°; 1-Bu (picrate), yellow, m. 197°; 1-benzyl, m. 180-2°; 1-(2-hydroxyethyl), m. 156-7° (3-methiodide, m. 172-3°); 1-(2-hydroxyethyl)-2-hydroxymethyl, with 1 mol. H₂O, m. 178-9°. 6-Chloro-7-methylbenzimidazole: 1-Et (HCl salt, m. 264°; picrate, yellow, m. 211-12°); 1-(2-hydroxyethyl), cream, m. 186-7° (HCl salt, m. 225°); 5,6-Dichlorobenzimidazole: 1-Et (HCl salt, m. 270°); 1,2-di-Me, m. 200° (picrate, lemon, m. 268°); 1-Et, m. 131-2°; 2-hydroxymethyl, m. 278° (decompn.); 2-hydroxymethyl-1-Me, m. 195°; 1-(2-hydroxyethyl), m. 162°; 1-(2,3-dihydroxypropyl), m. 152-3° (3-methiodide, m. 216°); 3-methochloride, m. 245-6°; 1-(2-hydroxyethyl)-2-hydroxymethyl, with 1 mol. H₂O, m. 168°; 5,7-Dichlorobenzimidazole: 1-Me, with 0.5 mol. H₂O, cream, m. 137-8°; 2-Me, m. 218-19° (HCl salt, m. 300° (decompn.)); picrate, yellow, m. 262° (decompn.); 2-hydroxymethyl, cream, m. 210°; 1-(2-hydroxyethyl), m. 152-3°; 1-(2,3-dihydroxypropyl), yellow, m. 180°; 1-(2-hydroxyethyl)-2-hydroxymethyl, yellow, m. 177-8°. 5-Bromobenzimidazoles: 1-Me, silver, m. 86-7° (picrate, lemon, m. 264° (decompn.)); 1,2-di-Me, m. 137-8°; 1-Et, m. 55°; 1-benzyl, m. 112°; 1-(2-hydroxyethyl), m. 92°; 1-(2,3-dihydroxypropyl), m. 140° (picrate), yellow, m. 181°. None of the above Ph derivs. showed activity against

L3 ANSWER 80 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 Trypanosoma equiperdum. Certain compds. showed spasmolytic action of the peripheral musculotropic type when injected i.v. into mice. 5,6-Dichloro-1-methylbenzimidazole, in particular, caused a mephenesin-like paralysis lasting 24 h.

IT 57842-33-8, Benzimidazole, 5-amino-2-(p-aminophenyl)-1-phenyl- (and derivs.)

RN 57842-33-8 CAPLUS

CN 1H-Benzimidazol-5-amine, 2-(4-aminophenyl)-1-phenyl- (9CI) (CA INDEX NAME)



L3 ANSWER 81 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 ACCESSION NUMBER: 1922:13369 CAPLUS
 DOCUMENT NUMBER: 16:13369
 ORIGINAL REFERENCE NO.: 16:2319c-i,2319a-i,2320a-c
 TITLE: Rearrangement of hydrazo compounds
 AUTHOR(S): Jacobson, Paul
 SOURCE: Ann. (1927), 427, 142-221
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 AB of C. A. 4, 44, 759. A. Rearrangement of di-p-substituted hydrazo compounds. While there are 2 possible isomers which may be formed by the rearrangement of the di-p-compds., when R and R' are different, only 1 o-semidine could be isolated. The difficulty of separation and the possible small amount of the other isomer may account for this. The most powerful directing groups in this connection are Eto and Me. In the case of compds. containing the AcO group, there is either hydrolysis or complete removal of the group. 4-Methyl-4'-iodoazobenzene by the action of KI upon MeC6H4N2C6H4N2Cl, reddish yellow, glistening leaflets, m. 165-6°. H2S in NH4OH reduces it to the hydrazobenzene, needles, m. 134°. The rearrangement was carried out by heating 10 g. with 12 g. SnCl2 and

30 cc. 25 % HCl. 5-Methyl-4-iodo-2-aminodiphenylamine (A) is formed in about 40% yield, m. 116-7°. Salicylaldehyde derivative, yellow needles, m. 132-4°. 6-Methyl-1-[p-iodophenyl]-2-mercaptopbenzimidazole, by heating A in 10 parts EtOH with 5 parts CS2, fine needles, m. 284-5°. Sodium salt. Mercury salt, needles. Methyl ether, needles, m. 139-40°. For purposes of comparison, 4'-methyl-5-iodo-2-nitrodiphenylamine (from p-MeC6H4NH2 and 3,4-(O2N)2C6H3Cl, red, felt-like needles, m. 104°) was reduced to the 2-amino derivative, leaflets, m. 96-7°, which gives a red-violet turbidity with FeCl3 and a salicylaldehyde derivative, yellow needles, m. 148°. That the rearrangement product of MeC6H4N2HNC6H4NO2 is 4'-methyl-5-ethoxy-2-aminodiphenylamine (Ann. 287, 177 (1955)) is proven by its synthesis from 4'-methyl-5-ethoxy-2-nitrodiphenylamine (long, light brown needles, m. 104°) by reduction with alc. (NH4)2S in a sealed tube, and the m. p. of the salicylaldehyde derivative, yellow needles, m. 121-4°. 4-Bromo-4'-ethoxyazobenzene from EtONa and EtI acting on BrC6H4N2C6H4OH, yellow, glistening needles, m. 135-6°. With Zn dust and NaOH in alc., the hydrazobenzene is formed, needles which soon turn yellow in the dark, m. 91-3°. Rearranged by treating with ZnCl2 and HCl in alc., 4'-bromo-5-ethoxy-2-aminodiphenylamine (B) is formed in a yield of about 48%, needles, m. 67-8°. It was characterized by the following derivs. 1-[p-Bromophenyl]-6-ethoxybenzotriazole, by the action of C5H11NO2, long, pointed leaflets, m. 145-6°. HCO2H gives the benzimidazole, needles, which turn violet in the air, m. 120° and form a colorless formate. Heated with 10 parts 25 % H2SO4 in a sealed tube at 180°, 1-[p-bromophenyl]-6-hydroxybenzimidazole results, pale violet needles, m. 295°. 1-[p-Bromophenyl]-6-ethoxy-2-mercaptopbenzimidazole, pointed needles, m. 255°. Salicylaldehyde derivative, small, yellow needles, m. 151°. 5-Bromo-4'-ethoxy-2-nitrodiphenylamine, dark red needles, m. 115°. The corresponding 2-amino derivative, isomeric with B, could not be crystallized but was characterized by the azimide, 1-[p-ethoxyphenyl]-6-bromobenzotriazole,

L3 ANSWER 81 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 needles, m. 129°, and the salicylaldehyde derivative, long, red-yellow needles, m. 146-7°. The rearrangement of 4-methyl-4'-acetoxymethoxybenzene (Ber. 24, 2310) gives 5-methyl-4'-acetoxymethoxybenzimidazole, glistening needles, m. 137°, in 31 % yield; its constitution is established by decompr. into p-C6H4(OH)2 and 3,4-(O2N)2C6H3Me. 6-Methyl-1-[p-hydroxybenzotriazole, pale yellow leaflets, m. 187.5-9.5°; with EtI and Na, it forms an ethoxy derivative, plates, m. 91°. The p-semidine, which is formed in 24 % yield, is MeC6H4NH2C6H4NH2 (Ann. 255, 166 (1889)). Salicylaldehyde derivative, m. 142°. FeCl3 gives a bluish violet changing to fuchsin-red color, changed by concd. HCl to yellow. 3',4-Dimethyl-4'-acetoxymethoxybenzene, fine needles, m. 65-6°. The rearrangement was carried out with ZnCl2 in HCl below 35°, and the products sepd. by cryst. from H2O. The p-semidine, 16 % yield, seps. as the HCl salt and is 2,4'-dimethyl-4-aminodiphenylamine, fine, glistening needles, m. 78.5°. The dil. HCl soln. gives a violet color with FeCl3 and a carmine-red color with NaO2. Salicylaldehyde derivative, m. 116.5°. The o-semidine, 3',5-dimethyl-4'-hydroxy-2-aminodiphenylamine (40% yield), could not be isolated as such, but was analyzed as 1-[m-methyl-p-hydroxyphenyl]-6-methylbenzimidazole, glistening leaflets, m. 196-7°. Hydrochloride, leaflets. p-Ethoxy derivative, analyzed as the hydrochloride, fine, long, rhombic needles, and as the picrate, flat prisms, m. 186-7°. 4,4'-Dimethyl-5-ethoxy-2-aminodiphenylamine (Ann. 287, 89 (1911)), m. 197°, the methylene deriv., 5-methyl-1-[p-tolyl]-6-ethoxybenzimidazole, forms fine needles, m. 102.5° and gives a picrate, needles, m. 228°. In the rearrangement of BrC6H4N2C6H4OAc (Ber. 31, 2116) only 5% of 4'-bromo-4-aminodiphenylamine is obtained, compact needles, m. 93.5°. FeCl3 gives a blue-violet color, changing to brick-red. NaO2 gives a dark red color, changing through orange to light yellow. Salicylaldehyde derivative, yellow leaflets, m. 172°. 4-Ethoxy-4'-dimethylaminobenzene, brown, glistening, 4-sided plates, m. 149-50°, the hydrochloride of which forms a lustrous, blue, feit-like crystal mass. Rearrangement gave 5-ethoxy-4'-dimethylaminobiphenylamine (C) oily. Salicylaldehyde derivative, golden leaflets with metallic reflux, m. 141.5-2.5°. 1-[p-Dimethylaminophenyl]-2-(o-hydroxyphenyl)-6-ethoxybenzimidazole, glistening needles, m. 162-3°, not hydrolyzed by acids. 1-[p-Dimethylaminophenyl]-6-ethoxybenzimidazole, needles after purifying through the picrate (green-yellow needles), m. 141-3°, forming a double salt with HgCl2. 2,3-Diphenyl-1-[p-dimethylaminophenyl]-2-hydroxy-7-ethoxyquinoxaline-1,2-dihydrate, by condensation with benzal, fine, canary-yellow needles, m. 187-90°. 5-Chloro-4'-dimethylaminobiphenylamine, from 1,3,4-(O2N)2C6H3Cl and H2NC6H4NMe2, reddish brown, needles, m. 181°. With EtONa, the 5-ethoxy-derivative results, dark brown, pointed crystals, m. 122-3°, which is reduced to C by SnCl2HCl, and identified by the above derivs. Trials with H2NC6H4N2C6H4NMe2, AcNC6H4N2C6H4NMe2 and Me2NC6H4N2C6H4NMe2 gave only decompr. products. The rearrangement of 8,8'-hydrozaphthalene to 2,2'-diamino-1,1'-dinaphthyl (Ber. 36, 4154) has been confirmed; the salicylaldehyde derivative (2,2'-bis-[p-methoxybenzylidene-amino]-1,1'-dinaphthyl), yellow powder, m. 194-5°. B. Rearrangement of simple p-substituted hydrazo compounds. Methyl 4-methoxyazobenzene-3-carboxylate, m. 65-7°. The free acid forms small, red needles, m. 167°, and upon reduction with Sn and HCl in MeOH forms

L3 ANSWER 81 OF 81 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 9,2-MeO(H2N)C6H3NHPh (Ber. 28, 2601), the yield being less than 10%. 2,3,4-Me2(AcNH)C6H2N2Ph, upon reduction with ZnCl2 gives 3,3',4-dimethyl-1-amino-4'-acetamidobiphenylamine, m. 174-5°. The HCl soln. gives a red-violet color with FeCl3 or NaO2. The salicylaldehyde derivative, yellow needles, m. 185-6°. The principal product of the rearrangement, however, is 3',4-dimethyl-2,4'-diamino-5-acetamidobiphenyl, characterized by its benzaldehyde derivative (3',4-dimethyl-2,4'-bis-[benzylideneamino]-5-acetamidobiphenyl), yellow-white, m. 204-5°; the salicylaldehyde derivative, pale yellow needles, m. 235-40°, and the acetyl derivative, clear plates, do not melt 360°. C. Rearrangement of non-p-substituted hydrazo compounds. In studying the rearrangement of di-m-substituted derivs., 3,5-dimethylbenzene, prep'd. from PhCO and m-Me2C6H3NH2, b17-19 187.5° was used. On reduction, this gave the hydrazobenzene, long, fine needles, m. 78-9°. The product of the action of ZnCl2 and HCl in EtOH is 2,6-dimethyl-4,4'-diaminobiphenyl (2,6-dimethylbenzidine), long needles, m. 124°. Benzaldehyde derivative, pale yellow, hair-like needles, m. 199-200°. Deamination gives 2,6-dimethylbiphenyl, b1260-5°, which was also synthesized from m-Me2C6H3NH2 through the diazo compd. and C6H6. Nitrated
 at room temp., a trinitro derivative is formed, transparent, 4-sided plates, m. 257-8°, while warming 3 hrs. gave a tetraniitro derivative, rectangular microplates, m. 227-9°. 2,4-Dimethylphenyl, from 2,4-Me2C6H6NH2, b167 270-6°, and giving a tetraniitro derivative, m. 154-5°. Finally, attempts were made to det. whether hydrazones containing aromatic and aliphatic groups, or those of the type (PhCH2NH)2 would behave as above. Pyroracemic aldehyde p-ethoxyphenylhydrazone, orange-yellow leaflets, m. 144.5°. A by-product in the reaction is di-p-ethoxyformate, methyl ketone, glistening, red needles, m. 143°, sepd. by its insolv. in alc. Pyroracemic acid p-ethoxyphenylhydrazone, canary-yellow needles, m. 120-2° (decomp.). Ethyl ester, red needles, m. 110°. The reduction of the Na salt with Na-Hg gives 3-[p-ethoxyphenylhydrazone]propionic acid, fine, yellowish white needles, m. 128-38° (decomp.), and reduces cold Fehling soln. Other expts. in this direction were without results. Full exptl. details of the above work are found in dissertations covering the period of 1894-1909. IT 661783-78-0, Benzimidazole-2-o-phenol, 1-p-dimethylaminophenyl-6-ethoxy- (ethoxy)
 (preparation of)
 RN 661783-78-0 CAPLUS
 CN Benzimidazole-2-o-phenol, 1-p-dimethylaminophenyl-6-ethoxy- (2CI) (CA INDEX NAME)

